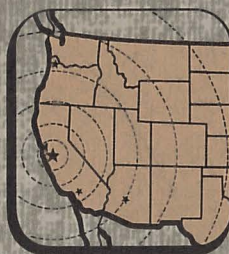


HE
601
H33
M3

PASSENGER TRAFFIC POTENTIAL BETWEEN
HAWAII AND THE MAINLAND

Prepared for

Matson Navigation Company
San Francisco, California



STANFORD RESEARCH INSTITUTE

Applied Research Center of the West

MENLO PARK, CALIFORNIA

HE
601
H33
M3

STANFORD RESEARCH INSTITUTE

MENLO PARK, CALIFORNIA

December 1955

PASSENGER TRAFFIC POTENTIAL BETWEEN HAWAII AND THE MAINLAND

by

H. E. Robison

SRI Project 1542

Prepared for

Matson Navigation Company
San Francisco, California

Approved:

Charles L. Hamman

Charles L. Hamman, Assistant Director
Economics Research Division

Weldon B. Gibson

Weldon B. Gibson, Director
Economics Research Division

FOREWORD

In July 1954, Stanford Research Institute submitted a report on the "Characteristics and Potential of the Hawaiian Tourist Industry" to the Matson Navigation Company. In this report the characteristics and trends of travel between the United States and Hawaii and hotel requirements in Hawaii were analyzed. This was part of an over-all project concerned also with passenger traffic potential between the West Coast of North America and Australasia.

Since that time Matson has made preparations for placing two ships in the West Coast-Australia run in the early fall of 1956. Decisions with respect to providing additional surface transportation between the Mainland and Hawaii have yet to be made.

It is the purpose of this project generally to bring up to date the data and conclusions of the previous report on Hawaiian tourism. The emphasis is changed somewhat in order to determine more specific answers to questions bearing on Matson's current management decisions concerned with purchase of the Monterey, establishment of revised fare structures for the Lurline, and Hawaii hotel policies.

Preliminary conclusions related to the present and potential demand for additional surface transportation between the Mainland and Hawaii, and the type and price of accommodations in greatest demand, are presented at this time. This portion of the report is specifically directed toward decisions about acquisition of the Monterey and toward Lurline rates.

The second portion of the report, concerned with Hawaii hotel operations, will be presented at a later date. Additional investigation incident to it may to some degree modify the findings and conclusions presented in this draft of the first portion of the report, but it is not believed any such changes will be significant so far as Matson's immediate decisions are concerned.

Maximum possible use has been made of the previous report both for consistency of presentation and because of time and expense factors involved. Material included in the previous report, even though pertinent to the present study, has been repeated only when modifications were appropriate. The present study, like the former one, is based on the assumptions that present world political tensions will not change for the worse and that American economic activity will continue to expand.

H. E. Robison, Project Leader, was assisted by Howard C. Nielson and Dolores Winans. The project was carried out in the Economics Research Division under the administrative direction of Robert O. Shreve. Consultations were also held with William E. Hosken, Manager of the Institute's Hawaii office.

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
FOREWORD	ii
I INTRODUCTION.	1
II SUMMARY AND CONCLUSIONS.	2
III ECONOMIC INDICATORS OF TOURISM	5
IV FOREIGN AND OVERSEAS TRAVEL POTENTIALS . .	11
All Overseas Areas	11
Hawaii	16
Sea versus Air Travel to Overseas Areas.	16
V CHARACTERISTICS OF HAWAII VACATION TRAVELERS.	19
Age	19
Sex	20
Income	20
Size of Party.	23
Occupations.	24
Time Available and Length of Stay.	24
VI ORIGINS OF HAWAII VISITORS AND COMPETITIVE FACTORS.	26
Geographical Distribution	26
Transportation and Other Costs	29
Competitive Areas	29
The Position of California and the Three Pacific States.	35
VII SEASONAL FACTORS.	36
VIII ANTICIPATED GROWTH OF HAWAII TOURISM.	40
Total Traffic.	40
Proportion of Travelers by Sea.	43
Jet Aircraft.	50

Table of Contents (Continued)

<u>Section</u>	<u>Page</u>
VIII ANTICIPATED GROWTH OF HAWAII TOURISM (Continued)	
Estimated Seasonal Load Factors	53
Rate Structures	55
Number and Size of Vessels Required	62
APPENDIX	66

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Comparison of Total Local Passenger Traffic Between Hawaii and Mainland With Basic United States Economic Data and Visitors to Western National Parks	6
2	Travel of United States Citizens to Foreign Countries Compared with Total Local Passenger Traffic Between Hawaii Staying Two Days or Longer and with United States Disposable Income Payments	12
3	Travel of American Citizens to Various Overseas Areas	14
4	Increase in Number of Visitors to Hawaii by Age Group	21
5	United States Population Forecasts by Age Groups	22
6	Comparative Air Fares from Certain American Cities to Various Overseas and Foreign Travel Objectives	31
7	Projection of Local Hawaii-United States Mainland Traffic Compared with Disposable Income Payments	44
8	Weighted Average Lurline Rate Structure Compared with Actual Average Fares and Airline Rates . .	57
9	Comparative Rate Structures of the Lurline and Monterey	61
10	Hawaii-Mainland Westbound Visitors Traffic Projection	64

LIST OF TABLES

<u>Number</u>		<u>Page</u>
I	Matson Passenger Traffic Between the Mainland and Hawaii by Areas of Origin Compared with Regional Distribution of United States Population for 1955 . .	27
II	Airline Distances and First-Class One-Way Fares from Selected Cities to Hawaii and Jamaica	30
III	Regional Origin of Westbound Visitors to Hawaii Who Stay Two Days or Longer Compared with Origin of United States Travelers to Europe.	39
IV	Percent of Actual Passenger Load to Total Passenger Capacity of Lurline.	45
V	Projection of Number of Passengers in Hawaii-Mainland Local Traffic	48
VI	Projection of Number of Westbound Visitors to Hawaii Staying Two Days or Longer.	49
VII	Projection of Potential Sea Travelers to Hawaii.	51
VIII	Lurline and Monterey Rate Schedules.	59

LIST OF APPENDIX TABLES

I	Comparison of Total Local Passenger Traffic Between Hawaii and Mainland with Basic United States Economic Data and with Visitors to Western National Parks and to Hawaii National Park	67
II	Travel of United States Citizens to Foreign Countries Compared with Total Local Passenger Traffic Between Hawaii and Mainland, with Westbound Visitors to Hawaii Staying Two Days or Longer, and with United States Disposable Income Payments. . .	68
III	Travel of United States Citizens from Mainland to Overseas Areas by Sea and Air.	69

List of Appendix Tables (Continued)

<u>Number</u>		<u>Page</u>
IV	United States Population Forecasts by Age Group.	70
V	Comparative Air Fare Data	71
VI	Projection of Total Local Hawaii-United States Mainland Traffic Compared with Disposable Income Payments	72
VII	Weighted Average Lurline Rate Structure Compared with Actual Average Fares and Airline Rates	73

Section I

INTRODUCTION

Data now available for 1954 and 1955 confirms and strengthens Hawaii's favorable position in the American travel market. Long known to the American traveling public as an all-year vacation playground virtually without equal anywhere, the large number of new hotel accommodations provided in 1955 and projected for the future, and the increased availability of relatively low-cost air transportation, will give Hawaii the facilities for attracting an ever larger proportion of potential total visitors.

It now appears that Stanford Research Institute's projections of total Hawaii travel presented in July 1954, should be revised upwards. This is true regardless of Matson's decision with respect to supplementing its present surface transportation facilities, but there are strong indications that an affirmative decision by Matson would still further increase the popularity of Hawaiian holidays.

The effects on Hawaii tourism of faster air trips made possible by future jet planes, and of the resumption of Australian ship passenger service, could not have been determined exactly even if a much more extensive survey had been undertaken than was possible within the time and cost limitations of this project. The conclusions presented with respect to these factors are the result of indirect methods of analysis and a summary of informed opinion rather than of direct sampling or questionnaire techniques. They are nevertheless believed to be soundly reasoned, and every effort has been made to make them conservative.

As in the previous report, no attempt has been made to provide financial or operating analyses of either present or possible future facilities, as they are beyond the scope of the present study.

Section II

SUMMARY AND CONCLUSIONS

Economic Indicators

Conservative forecasts of United States population, gross national product, disposable income, and consumer expenditures all indicate a continued healthy growth in the national economy for the next twenty years.

Not only are average disposable (after tax) incomes higher today than ever before, but families earning \$7,500 or more of annual disposable incomes are increasing faster than the average disposable income of all families. By 1960 this group is expected to account for one-third of the total expenditures of all income groups.

Recreation expenditures of all income groups have increased as their ability to consume has become steadily greater. Travel, one of the most important forms of recreation, has assumed the proportions of a major industry. Foreign and overseas travel for pleasure is increasing more rapidly than domestic, and its future growth seems assured as ever larger numbers of people have the time and money to satisfy their desires to visit far-away places.

Hawaii Travel Potential

The growth of Hawaii's tourist industry, large as it has been since the end of World War II, has been retarded by the lack of adequate visitor accommodations. With the present and planned expansion of its hotel facilities, and its favorable geographic position with respect to the nation's most rapidly growing area--the Pacific Coast--there is every reason to believe that Hawaii's future tourist growth will exceed that of the past. Hawaii is a major objective of travel-minded Americans.

Hawaii Visitor Characteristics

Hawaii's visitors are different in important respects from those to other overseas and domestic vacation areas. They have more time to spend away from home, are less restricted in their seasonal travel patterns, have larger incomes to spend, generally are older, and have different regional origins. Their primary purpose is pleasurable relaxation rather than sightseeing in strange and unfamiliar surroundings. Hawaii has less competition for the kind of vacation it offers than do most areas.

Forecasts of Numbers of Hawaii Visitors

Projections of Hawaii visitor travel in 1975 vary widely, but it is apparent, based on Hawaii's better-than-average performance during the past two years, that previous estimates of the Hawaii tourist volume have been too conservative. Excluding Island residents and persons whose destination is Hawaii but who stay there for less than two days, Stanford Research Institute estimates a total of 335,000 visitors by 1975. At least 90 percent of these visitors will be on pleasure or combined business and pleasure trips. It is this group that offers the greatest potential for surface transportation. The projected total is well below the goal of the Hawaii tourist industry, and seems conservative for planning purposes.

Potential Traffic for Ships

An analysis has been made of the reasons why overseas visitors choose surface or air travel. It is concluded that a reasonable potential for the outbound sea voyage is 35 percent of the combined sea and air total of persons making the trip primarily for vacation or pleasure purposes. Inbound participation is estimated at 30 percent, for an average of 32.5 percent by sea in both directions.

On this basis, the following numbers of Hawaii visitors from the Mainland will be potential customers for sea trips to the Islands in the years indicated, in addition to those who can be carried on the Lurline and other ships now in service:

Potential Traffic for Additional Ships

Year	Outbound	Inbound	Total
1955	11,000	9,000	20,000
1958	24,000	19,000	43,000
1960	32,000	27,000	59,000
1965	53,000	45,000	98,000
1970	74,000	63,000	137,000
1975	95,000	80,000	175,000

It is possible that the share of potential total visitors to Hawaii carried by ships may decrease in the years after 1965. This may occur when the visitor total includes a larger proportion of those in lower income groups. This should not be a serious consideration at the present time. The 32 percent participation needed to achieve an annual overall 94 percent load factor on the Monterey (42,000 persons in both directions) in 1958 will decrease steadily to a 20 percent participation in 1965 and 13 percent in 1975.

Inauguration of jet aircraft service anticipated for 1960 or 1961 should not materially reduce, and may even increase, the aggregate volume of surface travel between the Mainland and Hawaii.

Rate Structure

Present Lurline rates could be increased without affecting load factors under existing economic conditions. Increases in rates for the lower-priced rooms in comparable types of private bath accommodations should be greater than increases in the more expensive rooms in order to reduce the fare differentials between acceptable alternate space.

Rates for rooms with public baths should be increased relatively less than rooms with private baths, as the former are more competitive with airline business.

Competitive Factors

Indications are that the addition of a second new ship, such as the LaGuardia, to the Hawaii-Mainland route would adversely affect load factors on all three vessels (including the Monterey and Lurline) until about 1965. Despite a higher rate structure, however, Matson should have a considerable competitive advantage over a LaGuardia-type vessel put in service by inexperienced operators.

Conclusions

Stanford Research Institute's analysis of the Hawaii visitor potential leads to the conclusion that the demand for surface transportation between the Mainland and Hawaii is sufficiently great to justify addition of another ship to Matson's passenger service, and to make possible reasonable fare increases without reducing present load factors.

Section III

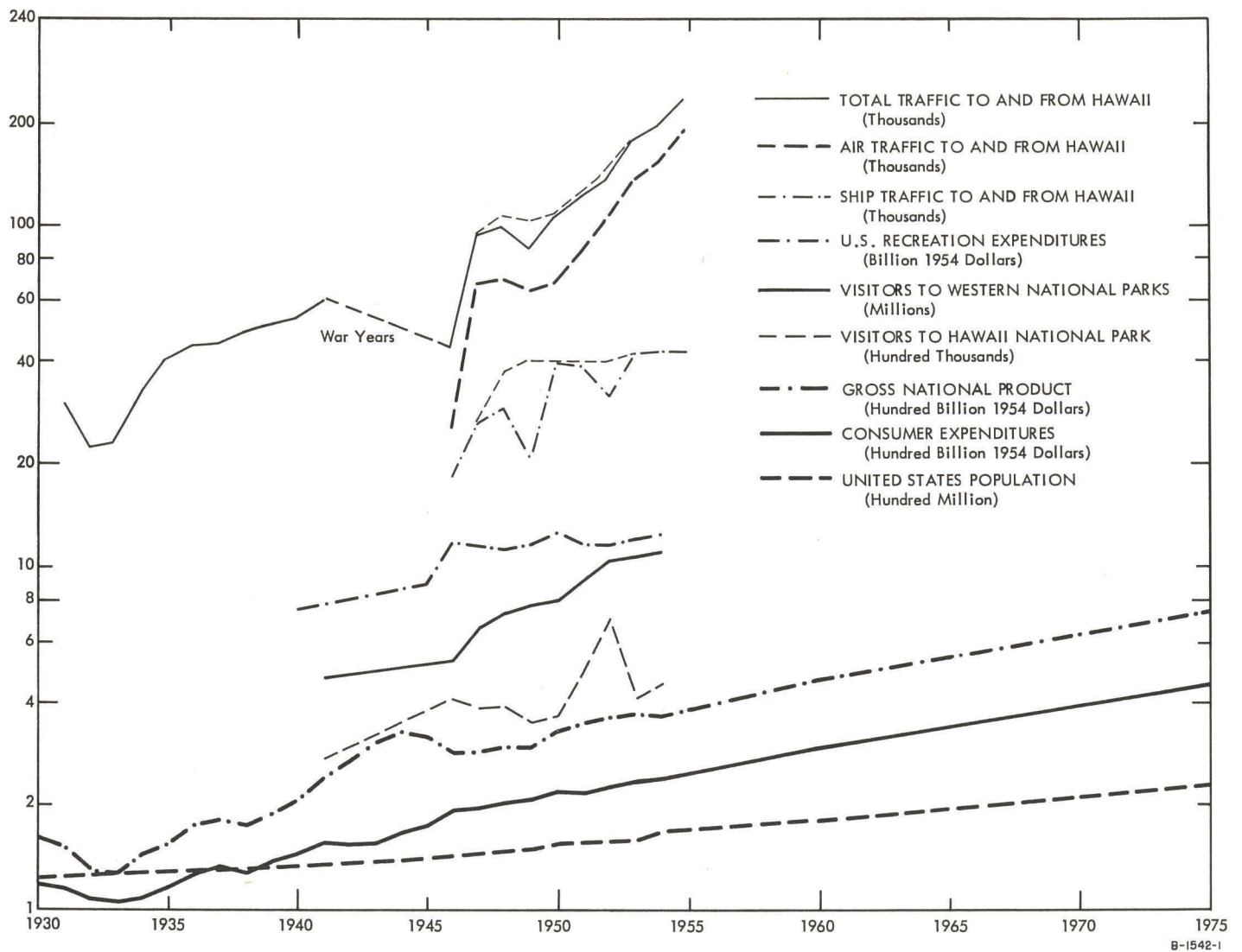
ECONOMIC INDICATORS OF TOURISM

Forecasts of population, gross national product, disposable personal income, and consumer expenditures are of basic importance in forecasting future vacation travel potentials of Americans, both to the Mainland and to overseas regions. Stanford Research Institute projections indicate that the United States population will increase to about 222 million persons by 1975, compared with 152 million in 1950 and 164 million in 1954. Gross national product, in terms of 1954 dollars, may be expected to rise to about \$714 billion in 1975 compared with \$322 billion in 1954. Disposable personal incomes, \$243 billion in 1954, are increasing by some \$9 billion per year and by 1975 should reach \$442 billion (1954 dollars). Consumer expenditures closely parallel the gross national product and that portion of it available to individuals for their disposition.

Recreation expenditures of Americans, as reported by the Bureau of the Census (adjusted to 1954 dollars), are shown with the foregoing economic indicators in Figure 1. The close parallel between disposable incomes and recreation expenditures is significant in assessing future travel potentials. As can be seen, in 1946 there was a sharp increase in the proportion of recreation expenditures to total disposable income, resulting from the lifting of wartime controls, but since then recreation expenditures have increased more slowly than might have been anticipated considering the continued significant increases in incomes available for nonessential disposition.

Travel, of course, is but one of many alternatives for the use of "surplus" or recreational funds. Shorter work weeks, measured both in hours per day and days per week, give increased opportunity for leisure but not necessarily for travel. Longer vacations, on the other hand, change travel habits, which are reflected in the increased visitation figures to western national parks, for example. Doubtless there are limits upon the share of disposable income used for recreation and of the share of recreation expenditures used for travel. That the limits of travel expenditures, particularly, have not yet been reached is apparent from the rapid and continuing postwar travel figures.

The extent to which available funds will be used for travel is dependent upon length of vacations, transportation and accommodations



Source: Appendix Table I.

Note: Dotted lines on Hawaii Travel Curves indicate estimated total if there had been no strikes.

Figure 1

COMPARISON OF TOTAL LOCAL PASSENGER TRAFFIC BETWEEN HAWAII AND MAINLAND WITH
BASIC UNITED STATES ECONOMIC DATA AND VISITORS TO WESTERN NATIONAL PARKS

facilities, educational levels,^{1/} effectiveness of advertising and sales campaigns, and the extent to which other individual wants have been satisfied. It is particularly noteworthy that the effect of the slight economic recession experienced in 1954 varied considerably among vacation regions and individual resorts. Many were able to increase their total business in the face of over-all declines. Foreign or overseas travel particularly, despite impressive postwar gains, is still below its prewar relationship with national income.

These general comments, based on averages, may be misleading when applied to specific areas which cater to the nontypical or above-average visitors. Recreation expenditures (including foreign and overseas but not domestic travel costs) are currently approximately \$10 billion annually; but such expenditures, measured as a percent of total cash expenditures, are no higher for the income groups in excess of \$7,500 (after taxes) than for those in the \$4,000-\$5,000 annual income bracket, despite the former group's greater ability to consume "luxuries." The greater tendency of the higher income groups to save means that they will be better able to increase their already larger foreign travel or recreational outlays at some future time. It is also expected that the number of family units with an annual income of \$7,500 or over (after taxes) will increase more rapidly than average or total national incomes. In 1953 this group accounted for about one-fourth of the total expenditures of all income groups; by 1960 it should reach one-third of the total. The \$5,000-\$7,500 (after taxes) group will also increase its share of the total expenditures from slightly more than one-fifth to over one-fourth.

Much has been made of the relative decline in the luxury vacation market because the impact of high taxes is proportionately more for the higher income groups than the lower. Nevertheless, the \$100,000 and over income group has more than doubled, both in numbers and dollars, since 1947. With a relatively stable dollar, however, and consequently greater difficulty in accumulating capital gains in the future, prospects for further large increases in these top brackets are dimmer. Persons whose incomes enable them to live spectacularly are less inclined to do so than in the predepression years of the 1920's, and the trend toward top luxury demand is declining. However, the number of

^{1/} In income levels of \$10,000 and upward, college graduate family heads spend about 50 percent more for vacations than do persons with less than high school educations.

persons with incomes of less than \$100,000 a year after taxes who can afford to spend a large portion of their total incomes for luxuries is increasing rapidly. The income groups between \$4,000 and \$25,000 now account for \$27.5 billion, or 80 percent of the nation's total luxury income, against only \$9.3 billion or 40 percent in 1929, and for 23 million family units against 7.1 million in 1929. (Only about 227,000 families have after-tax incomes of more than \$25,000.)

Of this \$27.5 billion available income, \$7.9 billion are distributed among 800,000 family units with incomes from \$15,000 to \$25,000 after taxes; \$6.1 billion among 1.2 million units with incomes of \$10,000 to \$15,000; and \$6 billion among the 13 million families earning \$7,500 to \$10,000. It is among these 5.2 million families with incomes of more than \$7,500 that the greatest market for overseas travel may be expected to be found—particularly in that part of the market with time and financial ability to consider surface rather than air travel. The 8 million families with incomes of \$5,000 to \$7,500 after taxes may contribute also to the total overseas market but are not likely to be as interested in surface transportation as those in the higher groups.

Studies made for the Federal Reserve Board indicate that the number of families with \$5,000 or more annual incomes (before taxes) has increased from 7.2 million in 1948 to 14 million in 1954, nearly a 100 percent increase, while total families increased only 12.6 percent. Furthermore, 67 percent of such families possess liquid asset holdings of \$500 or more.

Families in the \$5,000-\$6,000 income bracket surveyed for the Curtis Publishing Company's 1955 report on "The Travel Market" spend \$256 for vacations, on the average. Families in the \$10,000-\$15,000 group spend \$627, and those with incomes over \$25,000 spend \$1,137 annually for vacations. In all these groups, 62.4 percent of the vacations were financed by current income only, 12.3 percent by savings only, and 14.7 percent by a combination of these sources. Less than one percent reported borrowing money for vacation travel.

It is significant that the difference in luxury demand among the top groups is much less than formerly, one of kind than of degree. Persons in the lower brackets of these groups may not buy as often, or as much, but what they do buy is remarkably comparable with the desires of the upper bracket members. In other words, the great medium-high "mass" market is greater than ever and growing rapidly; it is more homogeneous than ever before. The range of facilities required is narrower, but their general level is higher.

The relatively small over-all impact of business recessions such as that of 1954 on the overseas travel market can be explained by several offsetting factors. Rents and dividends account for a larger proportion of the incomes of those in the overseas travel income groups; dividends may hold reasonably steady because of tax cuts; and tax cuts expand the "luxury" spending of those whose incomes remain steady. Whether or not high income will sustain luxury expenditures is more questionable, as spending is tied in with psychological factors and can readily be postponed. The luxury and overseas travel market is a market that must be sold if its potential is to be realized. Increased promotional effort may well postpone or prevent travel declines resulting from mild cyclical business downswings, particularly in the face of strong, underlying, long-term growth trends such as those so evident today. There is no present indication that the American economy will not go on expanding. An expanding economy is synonymous with an expanding leisure and recreational market. If, as has been predicted, this market doubles from the current \$35 billion to \$70 billion in 1970, U. S. recreation expenditures, including overseas travel, will almost certainly increase to levels heretofore considered impossible—providing that facilities are made available for their enjoyment commensurate with their desires.

Foreign travel is among the most dynamic segments of this market and has one of the greatest potentials for growth: it has increased from \$600 million in 1947 to about \$1.5 billion in 1955--still a relatively small total for the 5 million families in the \$7,500 and up income group. Satisfaction of the inherent desire for travel on the part of most Americans depends on time, money, and facilities. To a greater extent than ever before, people have the time and money, and much more of each is predicted in the years to come. Those resort areas with adequate transportation and other facilities may be expected to reap the benefits if their attractions are aggressively promoted.

The reverse of this--underdeveloped, inadequate, or overcrowded facilities--will limit the number of visitors to numbers far below the potential available, as has already been seen in many western national parks where prewar accommodations have proved grossly inadequate to serve postwar crowds, resulting in proportionate and even absolute declines in visitors despite the over-all growth of travel.

Given facilities to handle the business available, the biggest promise of new leisure expenditure seems to be in vacations either in foreign (overseas) or domestic resorts. The bulk of this increase will be accounted for by air travel because most Americans still have only two

or three weeks of paid vacations each year. But it can by no means be concluded that the potential for sea travel has been reached, either in absolute or relative terms. Sea transportation has not been available on either coast in sufficient quantity to meet the market demand. Comparing actual sea travel with the overseas travel total inevitably leads to the conclusion that there is a greater proportionate potential for growth, based on the present limited base, than has yet been realized.

The stability of this potential is outlined by a peculiarity of the leisure market: the fact that it promises to outperform the general economy in nearly every conceivable circumstance, whether that economy is rising rapidly, rising slowly, holding steady, or even declining. There seems to be virtually no limit to the market for pleasure.

Section IV

FOREIGN AND OVERSEAS TRAVEL POTENTIALS

All Overseas Areas

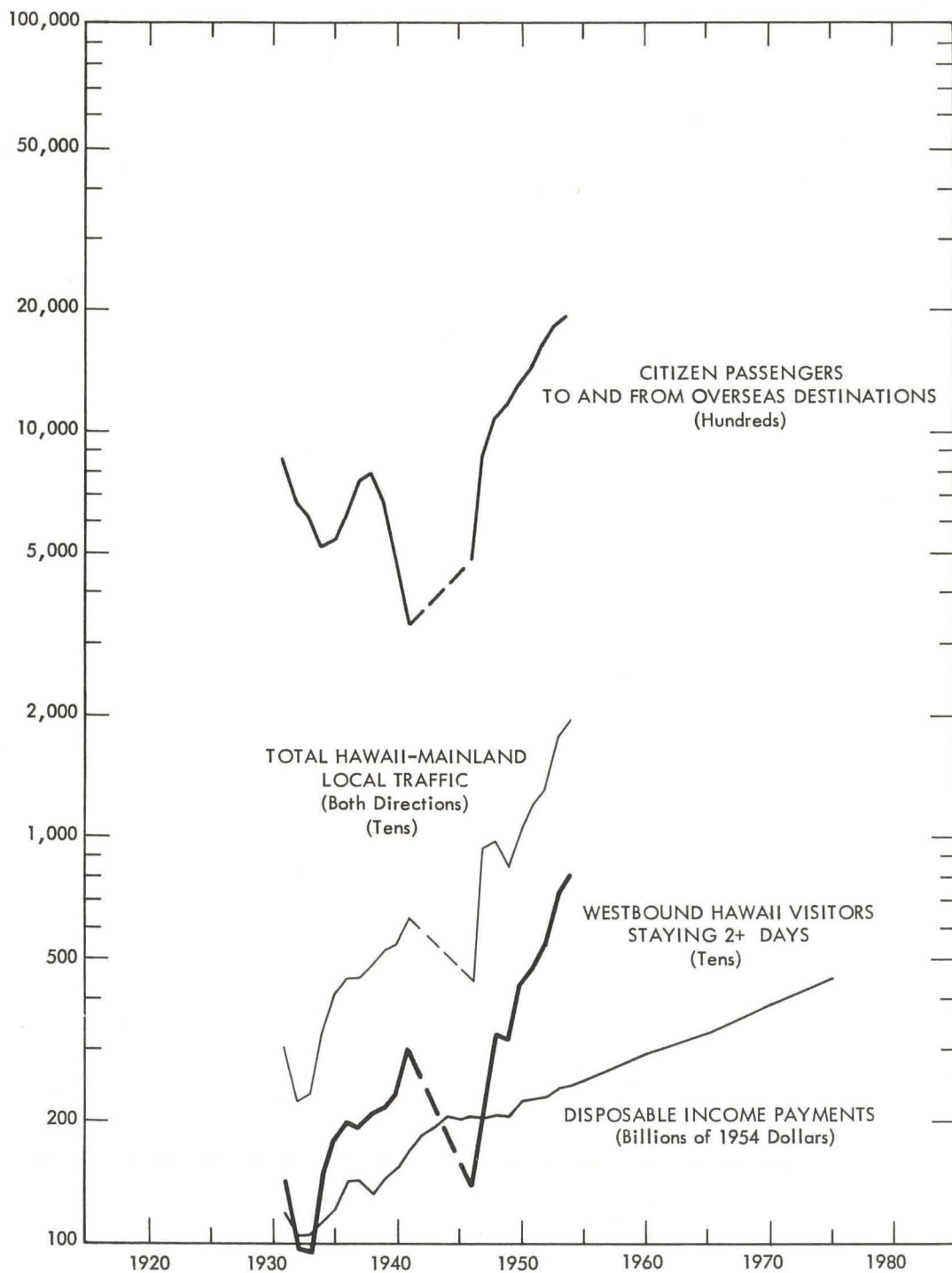
In Figure 2, disposable personal income, projected to 1975, has been plotted against actual travel data of American citizens to and from overseas ports and Stanford Research Institute's estimate that such travel will increase to 3.5 million one-way trips (1.75 million travelers) by 1975. This estimate is based on a projection of the gross national product trend. It appears to be reasonably conservative in view of the market possibilities for increased travel previously discussed, which could boost the total to 2 million persons or more if present trends should be maintained.

A new high of 452,049 passports issued was reached in 1954, an increase of slightly more than 8 percent over those issued in 1953. This total compares with 299,665 issued in 1950. On the basis of current estimates, the 1955 total will be substantially higher than that for 1954.

It is noted from data supplied by the Passport Division of the United States Department of State that the overseas travel market is broadening considerably, with relatively more applications from areas distant from the Atlantic Seaboard. The Middle Atlantic States accounted for 45.3 percent of the total passports issued in 1950 but only 36.6 percent of those issued in 1954. (The heavy concentration of foreign-born residents living in New York City is an important factor in these totals.) During the years 1950-1954, the West North Central region increased its share of the total from 4.9 percent to 6.4 percent; the South Atlantic from 6.3 percent to 11.2 percent; the West South Central from 3.6 percent to 4.5 percent; the Mountain region from 1.7 percent to 3.3 percent; and the Pacific States from 9.3 percent to 9.8 percent.

These data indicate that the overseas travel market is increasingly becoming a national rather than a regional phenomenon, and that distance is now less important in determining travel destinations.

The tabulation on page 13 sets forth the seasonal destination of travelers, based on passports issued and renewed in 1954, expressed in percentages of the totals, and compared with Hawaii visitors.



Source: Appendix Table II.

Note: Broken lines represent war years (except as indicated on line marked "Trend").

B-1542-2

Figure 2

TRAVEL OF UNITED STATES CITIZENS TO FOREIGN COUNTRIES COMPARED WITH
TOTAL LOCAL PASSENGER TRAFFIC BETWEEN HAWAII AND MAINLAND,
WESTBOUND VISITORS TO HAWAII STAYING TWO DAYS OR LONGER

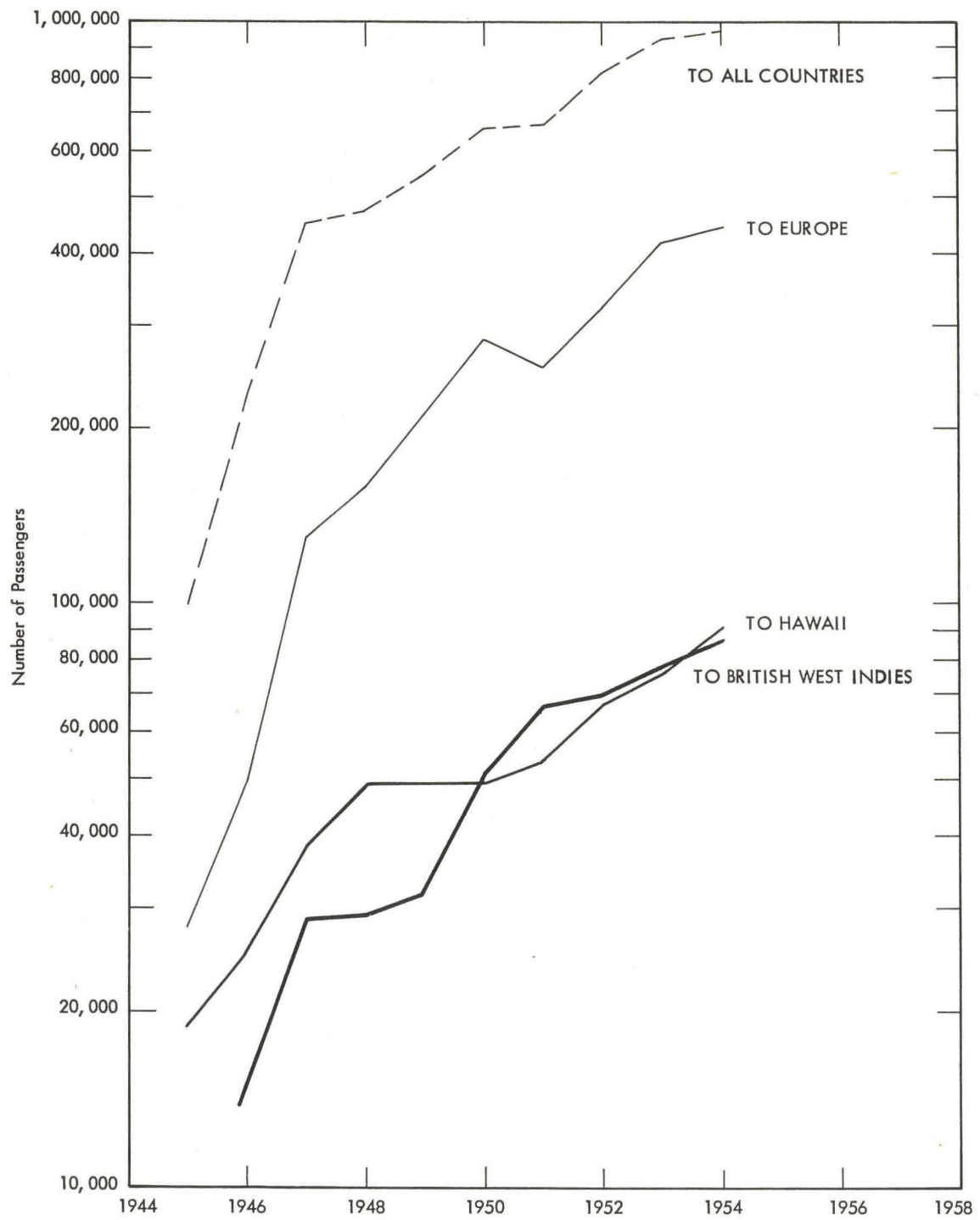
Destination of Travelers	Percent of Travelers Each Quarter in 1954				Annual Average Percent of Travelers
	1	2	3	4	
Western Europe	74.0%	80.4%	75.3%	63.1%	75.0%
Latin America	10.8	7.9	11.0	18.8	11.0
Near East	3.5	3.2	3.5	4.8	3.6
Eastern Europe	3.8	2.8	3.8	3.9	3.5
Africa	3.7	2.8	2.4	4.2	3.2
Far East	2.5	1.8	2.4	2.6	2.2
Australia and New Zealand	1.3	.9	1.4	2.4	1.3
Canada and Newfoundland	.3	.2	.2	.2	.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Seasonal Total	26.0%	37.3%	21.5%	15.2%	100.0%
Total Visitors to Hawaii	22.9%	26.4%	27.3%	23.4%	100.0%

As reported by the Statistical Yearbook of the United Nations, United States travel to nations in Europe increased from 871,908 in 1949 to 2,133,284 in 1953, or a gain of 245 percent; American travel to the Near East and North African countries totaled 57,000 in 1952, that to South and Central Africa was 3,900 in 1952, to the West Indies 113,600 in 1952, and to Asia and the Pacific Islands 28,100 in 1952.

Figure 3 shows the growth of travel by American citizens to various overseas areas.

There appears to be considerable difference between the places Americans actually go and the places they would like to go, based on the limited surveys that are available. A survey of American Magazine readers published by the Crowell-Collier Publishing Company in 1955 revealed that 16 percent of the vacation travelers visited countries outside the continental United States. Of this total only 3 percent visited Hawaii (less than 0.5 percent of the total sample), 63 percent Canada, 20 percent Mexico, 11 percent Bermuda and the West Indies, and 8 percent Europe.

Assuming normal world conditions, 58 percent of all those queried stated they would most like to visit Europe if they had their choice of traveling anywhere outside the United States. Eleven percent stated a preference for Canada, 9 percent for South America, 5 percent for



Source: Appendix Table III.

B-1542-3

Figure 3

TRAVEL OF AMERICAN CITIZENS TO VARIOUS OVERSEAS AREAS

Mexico, 4 percent for Asia, 3 percent for Alaska, 2 percent for Africa, and less than 1 percent each for Australia and Central American countries. However, over 16 percent expressed a preference for Hawaii, more than to any other area except Europe. Applying this percent to the travel to Europe in 1954 (some 425,000 persons) gives Hawaii a 1954 "potential" of 120,000 compared with the actual 81,000 westbound visitors who stayed two days or longer.

This potential is further confirmed by answers to the question, "What countries have you visited and do you anticipate visiting within the next five years?" The answers are given in percentages of the total responses in the following tabulation.

Destination	Visited As Civilian	Anticipate Visiting Within 5 Years
Canada	24.3%	14.0%
Mexico	12.4	10.6
West Indies	4.7	6.7
Europe'	4.5	13.1
Hawaii	2.3 ^{1/}	9.2
Central America	2.0	1.2
Alaska	1.7	3.8
Bermuda	1.6	5.0
South America	1.4	4.1
Asia	1.1	2.0
Africa	.9	1.4
Pacific Islands	.	.
except Hawaii	.7	1.9
Net total of sample visiting one or more countries or areas	33.0%	33.0%

If this sample is at all representative, and if traveler desires can be satisfied to any reasonable extent, the increase in Hawaii visitors may well exceed expectations.

^{1/} An additional 5.4 percent had visited Hawaii as members of the Armed Forces.

Hawaii

Travel to Hawaii is also charted on Figure 2. It is noted that the total local passenger traffic (i. e., destination either Hawaii or the Mainland) between Hawaii and the Mainland has increased faster than the total of all United States citizen overseas travel. It is also significant that although travel to all overseas destinations in the year ending June 30, 1954 shows only a modest increase over the preceding year's total, 1954 travel to Hawaii increased by more persons than in any comparable preceding year, and proportionately more than that to any other overseas area. This indicates the relative inelasticity of demand for Hawaii vacations and the strong backlog of unsatisfied demand for such travel.

Competitive factors that may influence the realization of Hawaii's future traffic potential are discussed later in some detail, but there is no reason to conclude that competition will adversely affect the growth of Hawaii's tourist industry. The major factor to be considered in projecting this growth is the availability of facilities to service the demand for vacations in the type of area that Hawaii is now and that should be preserved. Loss of this potential to other areas will be more the result of Hawaii's lack of facilities than of relative demand. The projection of Hawaii travel to 1975 is shown on Figure 7 (Section VIII).

Sea versus Air Travel to Overseas Areas

It is clear that most of the postwar growth of overseas travel has resulted from availability of fast and relatively cheap air transport which has made it possible for greatly increased numbers of Americans to visit countries other than their own within the limitations of the time and funds available to them. The proportion of sea travelers to the overseas total has accordingly declined substantially during the past several years. According to statements made in passport applications in 1954, ship travel accounted for 56 percent of the total overseas trips and aircraft 43 percent. In 1953, ships accounted for 58 percent and aircraft 41 percent. These percentages do not, of course, reflect the lower proportion of ship passengers to Hawaii, where passports are not required. Including all overseas travel, the London Economist reports (October 29, 1955) that 36 percent of American overseas travel was by sea in 1953, compared with 34 percent in 1954 and 29 percent in the first half of 1955.

It is important to note, however, that these figures, taken by themselves without proper analysis, can be seriously misleading. Travel

agents are quick to point out that available ships are sold out months in advance of sailing dates, except in the very highest priced accommodations. There is every indication that a considerably larger proportion of the total would be carried by surface transport if it were available, despite the cost and time factors which limit its practical potential. Even travel to Europe, with a relatively higher proportion of business travel, is over 50 percent by ship. (In 1954 50.4 percent of all passports issued were for personal or commercial business and 37.8 percent for pleasure travel. Compare this with 74.3 percent of westbound Hawaii visitors staying 2 days or longer who gave pleasure as their purpose, 6.0 percent business, and 12.9 percent a combination of business and pleasure.) Although travel to South America, Bermuda, and the British West Indies has been dominated by air transport, this is a reflection both of the large number of short-stay visitors to those countries and the relative unavailability of surface transport.

Nothing has occurred since the submission of Stanford Research Institute's previous report in July 1954 to change the conclusion stated therein that "The decline in the relative position of surface transportation, to Hawaii at least, has apparently been partly the result of lack of surface facilities to handle the expanding volume, and not alone of the time and cost factors." Americans, generally, and residents of the West Coast States, particularly, are "sea-minded" to an appreciable degree. Presently they do not have the opportunity, because of limited facilities, to satisfy their desire for sea travel to the extent they would if more cruises were available from Pacific mainland ports. The Lur-line is now the only ship regularly in service on the Pacific that offers a cruise of comparable length, so that no true comparison of the relative demand for sea versus air vacation transport can be obtained from carriage statistics.

86-98
The average ages of vacation travelers by plane on the Mainland is less than those traveling to Hawaii by air. Hawaii visitors in the higher age groups travel by air to a greater extent than they do when they take vacations on the Mainland. This indicates that they are willing to travel by air to visit Hawaii, but does not necessarily mean that they prefer to travel by air; doubtless many of them actually do not, but **they** have no choice.

This conclusion is confirmed by the Curtis 1954 survey of vacation travelers which revealed that 81 percent of the respondents who traveled by air did so because it was faster, 52 percent found it more convenient, 13 percent safer, better service appealed to 11 percent, no tipping to 10 percent, economy to 10 percent, courteous help to 9 percent, and more fun was given as the reason by only 3 percent. Similarly, 3 percent gave more time at destination as their reason for air travel, and another 3 percent used planes upon the recommendation of a travel agent.

People on vacations apparently use planes because they are faster and more convenient, not because they prefer to do so or find them more pleasurable. The low proportion of persons giving cheaper fares as a reason is also notable. It seems clear that if vacation travelers have the time and opportunity they will seriously consider surface travel--particularly if it is at least as enjoyable as their activities at the destination--even though the cost is higher.

This conclusion is confirmed by the respondents who used ships for vacation travel at an average expenditure of \$592 and for an average trip of 5,618 miles. Forty percent found the ship more fun, 38 percent more convenient, 18 percent were attracted by advertising, another 18 percent were influenced by travel agents, 13 percent reported it was more practical, 10 percent cheaper, 8 percent safer, only 5 percent said service was better or help more courteous, and 3 percent chose the ship for comfort.

It is doubtful if the present ship schedules to Hawaii are more convenient or practical for many travelers than plane schedules. Allowing for duplicate answers, between 40 and 50 percent of the travelers who used ships for these reasons would not have done so between the West Coast and Hawaii under present conditions. Probably another ship would not overcome the disadvantages of convenience and practicability entirely, but it would certainly reduce them considerably and therefore give the positive factors more influence in the choice made.

Section V

CHARACTERISTICS OF HAWAII VACATION TRAVELERS

The analysis in this section is largely confined to those persons from the United States whose ultimate destination is Hawaii, and who are traveling for pleasure or a combination of business and pleasure. These persons constitute nearly all of the travel total. "Through," government, foreign, or business travelers are not sufficiently numerous to affect conclusions drawn solely from an analysis of vacation visitors to Hawaii from the Mainland.

Age

In 1940, over 17 percent of the total visitors to Hawaii was under 20 years old. In 1954, this group accounted for only 8.4 percent. The 20-30 age group showed a similar decline from 26 percent to 13 percent of the total, but from 1953 to 1954 it increased from 10 to 13 percent. Likewise, the 20-30 age group declined from 20 percent in 1940 to 12 percent in 1953, then rose to 14 percent in 1954. These recent annual increases are doubtless due to the newly available low-cost tourist air fares with frequent schedules.

From 1940 to 1954, the proportion of travelers in their 40's increased from 15 percent to 20 percent, and those in their 50's from 11 percent to 23 percent. Persons over 60 were least important (9 percent) in 1940, but accounted for 21 percent in 1954 and 29 percent of Matson's Lurline passengers in that year (an increase of 2 percent from 1953). Passengers 50 years old and over were relatively more numerous on the Lurline than among all visitors to Hawaii in 1952, 1953, and 1954. The under-50 age group showed a preference for air travel.

Lower air fares have apparently attracted some business from the Lurline among the younger segments of the population, but this situation has only resulted in more space being made available for those older persons who prefer to make the trip by sea.

The increasing importance of the older age groups is in part due to the relative increase in the total numbers of older people in 1954 as compared with 1940, but this trend is not sufficient to account for the very substantial travel shifts. The median age of Hawaii visitors is 46; of the United States population (1950), 30.2; and of "through" visitors to Hawaii, 40. The median age of winter visitors to Hawaii

in 1954 was 51, (in February, 1955, it was 52, and for pleasure visitors only, 53); whereas that of summer visitors was only 43 in both 1954 and 1955. As noted by the Hawaii Visitors Bureau, the decrease in the cost and time required for a vacation in Hawaii, together with the recently completed, more moderately priced hotels, might well have resulted in a lowering of the average age of visitors to Hawaii. Although there has been some increase in the more youthful groups, there has been a much more than proportionate increase in the older age groups. (See Figure 4.)

The continued increasing proportion of older persons in the population of the United States (see Figure 5) will be favorable to the Hawaii tourist industry, and particularly favorable to the potential for sea passengers to the Islands. In these groups are found most of the persons with the time and money to spend on sea travel, and who desire restful vacations under ideal weather conditions, with the least inconvenience and most comfort.

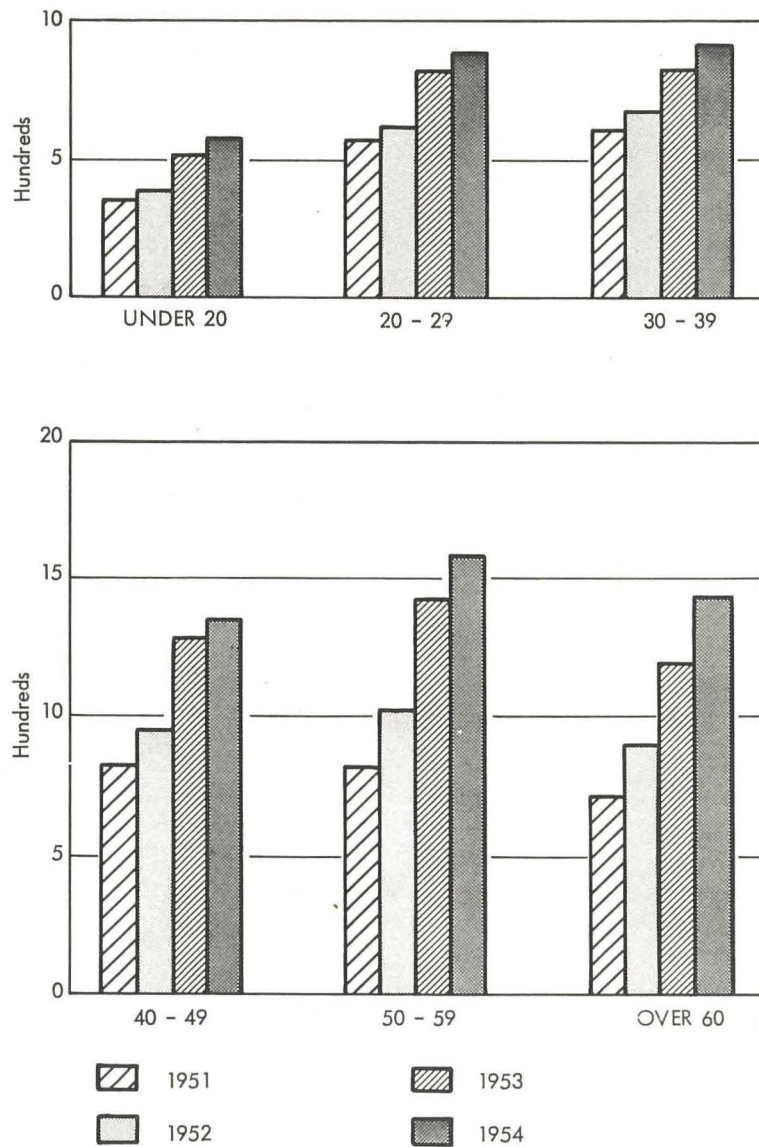
Sex

The proportion of women traveling on Matson ships has remained fairly constant between 1940 and 1954, having risen only from 60.8 percent to 62.5 percent. A definite trend toward women passengers, however, is noticed in the years since 1948. Since only 59 percent of all Hawaii visitors are women, they have a somewhat greater tendency to travel by ship than by air. Most of the women passengers (74 percent) are over 40 years old, but it is interesting that 5.1 percent are in their 20's and 6.3 percent in their 30's; the ratio of women to men in these two groups is larger than in any other.

Ship travel has a real appeal to women of all ages, and women traveling alone are particularly attracted to the Lurline.

Income

No more recent data concerning incomes of Hawaii visitors are available than were presented in the July, 1954 report, which summarized the visitor income survey made by the Hawaii Visitors Bureau in 1950-1951. The findings of that survey, which showed that nearly half of the visitors had annual incomes in excess of \$10,000 and three-quarters had incomes over \$5,000, emphasized the above average ability of the Hawaii visitor to afford relatively expensive vacations. It also revealed the higher incomes of winter as compared with summer visitors.

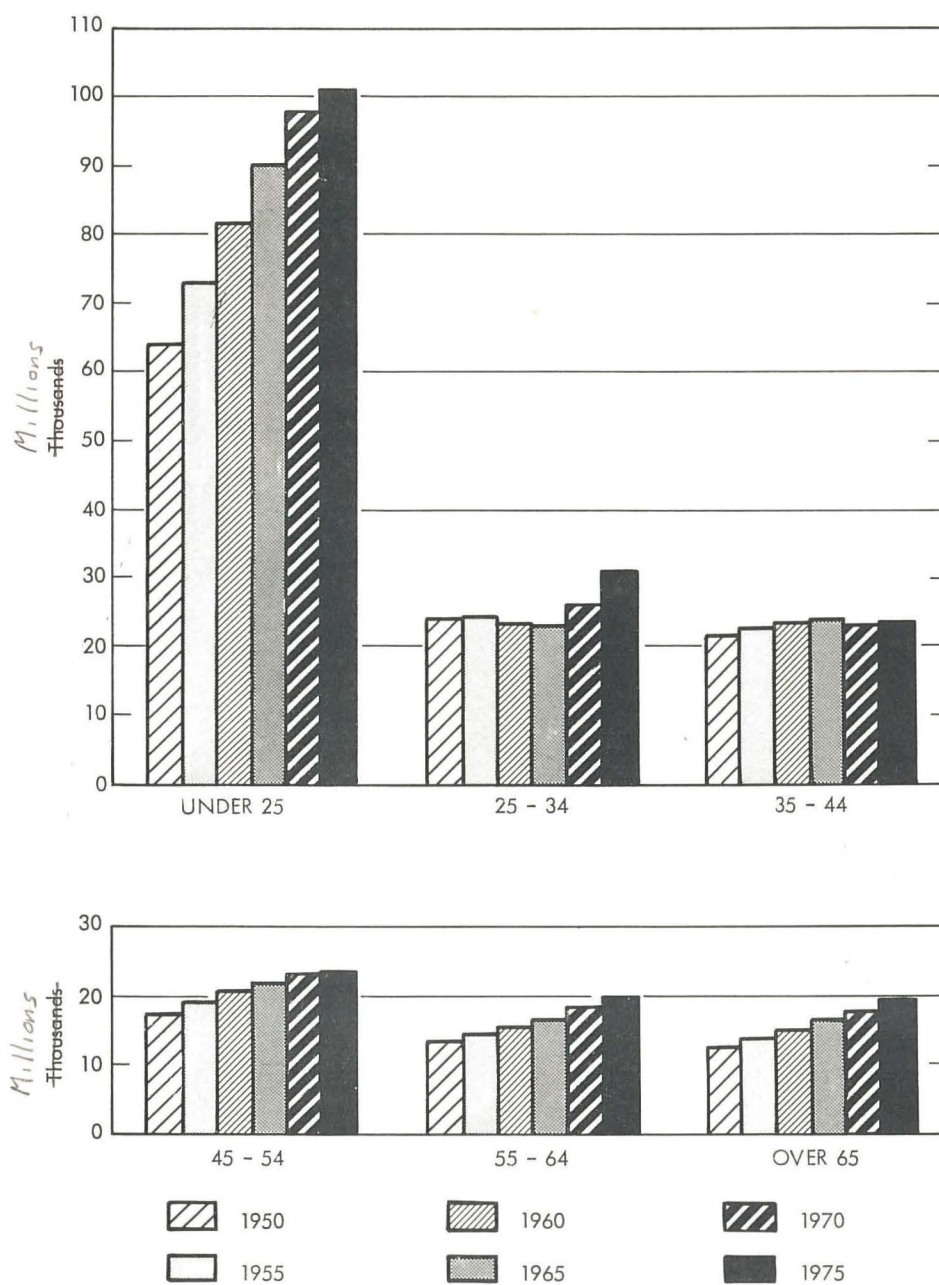


Source: Hawaii Visitors Bureau data.

B-1542-4

Figure 4

INCREASE IN NUMBER OF VISITORS TO HAWAII BY AGE GROUP



Source: Appendix Table IV.

B-1542-5

Figure 5

UNITED STATES POPULATION FORECASTS BY AGE GROUP

Despite the large increase in the total number of visitors since 1951 (when only 47,634 westbound persons stayed in the Islands two or more days), it is remarkable that reported average daily expenditures have remained high--\$25.00 in 1954 compared with \$27.77 in 1951. For visitors staying less than 90 days (the great bulk of the total) the average per-day expenditures in 1952 and 1954 were nearly equal--\$28.60 and \$28.90, respectively. At the same time, the average and median days length of stay in the Islands has remained high at 24 and 14 days, respectively.

It would probably be erroneous, in the light of these statistics, to assume that the great increase in numbers of visitors to Hawaii since 1951 has taken place in predominantly lower income groups. As has been noted in Section III, the number of persons in the United States who enjoy incomes (after taxes) of \$7,500 or more is increasing rapidly. Persons with smaller incomes can, of course, save toward a Hawaii vacation if they have sufficient desire to do so. But when they are on that vacation, they apparently act and spend like their higher income fellow vacationists.

Hawaii vacations are "something special." They are not indulged every year, even by those who can afford them. Despite the increase in popularity of the Islands, it appears that the proportions of those visitors who have relatively high incomes is being maintained. This is true regardless of the great boost to Hawaii travel given by tourist rate air transport, which will be discussed in more detail in Section VIII. It tends to confirm the statement that many of the tourist flight passengers could afford to travel first-class, but see no reason to do so, preferring to save the difference in cost for other vacation "extras," either in preparation (e.g., clothes) or at destination.

The continued high income level of Hawaii visitors and the ever-increasing number of Americans with high incomes, are of particular significance in estimating the potential number of passengers for another ship in the Mainland-Hawaii service.

Size of Party

In 1954, there were only 1.5 persons per party, and very little seasonal variation is noted in party size. This represents a decrease from 1.7 persons per party in 1953 and is particularly significant in view of the average of over 3 for all American vacation parties. The older persons who are so big a group in the Hawaii visitor totals have grown children who do not accompany them; and younger persons either

travel singly or leave the children at home. Only 5.2 percent of the 1954 westbound parties surveyed were composed of 3 or more persons, compared with 5.5 percent in 1953. In the first quarter of 1955, only 3.4 percent exceeded 2 persons, and in the third quarter, 7.0 percent. On the other hand, persons traveling alone accounted for 58.0 percent of the 1954 annual total, 49.6 percent of the first quarter total, and 62.4 percent of the third quarter total. Second and fourth quarter parties approximated the annual average in size.

Occupations

There are important differences in the occupational groups of Hawaii visitors as compared with those issued passports for foreign travel, partly because of the greater proportion of business travel to foreign countries than to Hawaii, and also because of the particular kind of experience Hawaii offers.

Professional and semiprofessional groups favor Hawaii to about the same extent as they do all foreign travel (18 percent of each total) but proprietors, officials, and other executives account for only 19.1 percent of foreign travel against 26.6 percent of Hawaii visitors, Office, clerical, and sales personnel also favor Hawaii, 13.3 percent to 10.9 percent. Skilled, unskilled, and service workers account for 5.7 percent of Hawaii visitors, but for 13.1 percent of foreign travel. Housewives prefer Hawaii (19.0 percent to 15.5 percent), but students do not (3.1 percent to 6.4 percent). And somewhat surprisingly, retired or unemployed persons account for only 6.8 percent of Hawaii visitors but for 9.7 percent of those to whom passports are issued.

These figures confirm the relative affluence of Hawaii visitors as compared with all overseas travelers and indicate the greater proportions in the age groups where incomes are highest.

Time Available and Length of Stay

A survey of travel characteristics of families in the \$5,000-or-more income group from October 1953 through September 1954, closely paralleling census distribution and income figures, revealed that 54 percent of the vacation families spent more than 14 days away from home, 33 percent spent more than 21 days away, and 22 percent were able to take trips in excess of 28 days.

Average number of days per vacation family was 20.3. In the \$5,000-\$7,000 income group it was 18.1; in the \$7,000-\$10,000 group, 21.1; in the \$10,000-\$15,000 group, 24.6; and in the \$15,000 and over group, 29.1 days.

Hawaii vacationers, on the average, stay 24 days in the Islands, but the median stay of westbound visitors is only 14 days. Thirty percent stay from 7 to 12 days, 29 percent from 13 to 18 days, and 14 percent from 19 to 24 days. Over 72 percent of all visitors are included in the 7-24 day groups, and only 6.4 percent stayed less than 7 days.

There are no available data comparing mode of travel and length of stay in Hawaii, or income and length of stay of Hawaii visitors; but it seems a fair assumption, based not only on time available but also on cost factors, that higher income groups stay at least as long in the Islands as do lower income groups. They can do this and still travel by ship because they have more time to spend away from home. If they travel on the Lurline both directions, however, their Island visit cannot exceed 12 or 13 days if they are to return to the West Coast port of departure within 22 days. Waiting for another inbound voyage would mean an absence from the Mainland of another 11 or 12 days, which would make it impossible for a great many people, even those with 4-week vacations, to make the Lurline trip both ways and still stay in Hawaii as long as they might wish, particularly if they come from other than Pacific Coast origins. A supplementary ship operating on a similar schedule would make it possible to spend 18 days in Hawaii within a 4-week vacation time limit compared with the present 12 or 13 days, and would also provide an opportunity for many more persons to travel both ways by ship and still have a satisfactorily long stay in Hawaii.

Section VI

ORIGINS OF HAWAII VISITORS AND COMPETITIVE FACTORS

Geographical Distribution

While the number of visitors to Hawaii who stay two days or longer and who live in Asia or Oceania has increased 250 percent since 1951, it is still (1954) less than 10,000 per year compared with over 80,000 visitors per year from North America. During 1955 the eastbound totals have continued to increase as have the Orient-and Australia-bound travelers from North America. Nevertheless, these visitors are even less important to the total Hawaii tourist economy than their share of the total number of visitors indicates. They do not stay as long since they are mostly "en route," even though they stop over for 2 or more days. More important for the purposes of this study, a much larger percent of Lurline passengers (93 percent) live in North America, and 5 percent are Hawaii residents. The proportion of North American residents has risen steadily from 66 percent in 1947, while that of Hawaii residents has declined from 33 percent as they have increasingly turned to air transport.

Residents of Asia and Australasia will continue to take the Lurline only in exceptional cases: when it is desired to make part of the trip by ship and part by air and schedules happen to coincide. Hawaii residents favor air travel more each year. Whether they would continue to do so if there were another ship in service is conjectural; some business would doubtless be regained because of the more frequent schedules and possibly greater availability of space. But it seems clear that North American vacationists (nearly all U. S. residents) will continue to monopolize Lurline space, and will also be overwhelmingly important in any supplementary Hawaii-Mainland service that may be provided. For this reason no further consideration will be given in this report to the relatively few actual or potential customers from other origins.

Table I indicates the absolute and relative origins of traffic as reported by Matson but revised to correspond to the geographic region breakdown used by the Census Bureau and Hawaii Visitors Bureau. It also shows the regional breakdown of the U. S. population in 1955 as estimated by Stanford Research Institute.

The three Pacific States, with only 10.5 percent of the total U. S. population, account for over 45 percent of the total Lurline traffic, but the proportion of these states has decreased by 25 percent since 1947.

Table I

MATSON PASSENGER TRAFFIC BETWEEN THE MAINLAND AND HAWAII BY AREAS OF ORIGIN
 COMPARED WITH REGIONAL DISTRIBUTION OF UNITED STATES POPULATION FOR 1955
 (Passenger Traffic in Both Directions)

	Total U.S. Population ^{1/} 1955		1955 ^{2/}		1954		1953		1952		1951		1950		1949		1948		1947	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total			29,000	100.0	39,207	100.0	38,910	100.0	27,972	100.0	34,355	100.0	36,369	100.0	17,711	100.00	27,694	100.0	26,126	100.0
Total U.S. Mainland	164,991	100.0	26,976	93.0	36,501	93.1	35,900	92.3	25,278	90.4	29,939	87.2	31,223	85.8	15,942	90.0	22,264	80.3	17,329	66.4
Number and Percent of U.S. Mainland		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0
New England States	10,060	6.1	683	2.5	749	2.1	613	1.7	424	1.7	489	1.6	558	1.8	339	2.1	451	2.0	358	2.1
Middle Atlantic States	32,120	19.5	2,721	10.1	3,417	9.4	2,718	7.5	1,788	7.1	1,844	6.2	2,537	8.1	1,396	8.7	1,830	8.2	1,377	7.9
East North Central States	33,350	20.2	4,941	18.3	6,402	17.5	5,929	16.5	4,457	17.6	3,507	11.7	3,981	12.8	2,652	16.6	2,574	11.6	1,720	9.9
West North Central States	14,850	9.0	2,122	8.0	2,535	6.9	2,670	7.5	1,655	6.5	1,505	5.0	1,840	5.9	1,365	8.6	1,171	5.3	735	4.2
South Atlantic States	23,615	14.3	880	3.2	1,356	3.7	1,101	3.1	623	2.5	654	2.2	822	2.6	351	2.2	662	3.0	632	3.6
East South Central States	11,850	7.2	252	1.0	352	.9	354	1.0	228	0.9	246	0.8	214	0.7	129	0.8	260	1.2	152	0.9
West South Central States	15,830	9.6	1,222	4.5	1,880	5.2	1,660	4.6	771	3.0	811	2.7	1,028	3.3	425	207	662	3.0	474	2.7
Mountain States	5,923	3.6	1,759	6.5	2,572	7.1	2,715	7.5	1,780	7.0	1,840	6.1	2,457	7.9	1,176	7.4	1,281	5.8	993	5.7
Pacific States	17,393	10.5	12,396	45.9	17,238	47.2	18,140	50.5	13,552	53.6	19,141	63.9	17,786	57.0	8,174	51.3	13,373	60.1	10,880	62.8
Washington	2,602	1.6	847	3.1	1,114	3.0	1,071	3.0	1,001	4.0	1,156	3.9	1,239	4.0	738	4.6	980	4.4	744	4.3
Oregon	1,680	1.0	630	2.3	624	1.7	753	2.1	695	2.7	760	2.5	794	2.5	583	3.7	531	2.4	505	2.9
California	13,111	7.9	10,919	40.5	15,500	42.5	16,316	45.4	11,856	46.9	17,225	57.5	15,753	50.5	6,853	43.0	11,862	53.3	9,639	55.6
Other--Number and Percent of Total																				
Hawaii			1,390	4.8	1,776	4.5	2,081	5.3	1,966	7.0	3,684	10.7	4,677	12.9	1,498	8.5	5,195	18.8	8,503	32.5
Canada and Other Foreign			634	2.2	930	2.4	929	2.4	728	2.6	732	2.1	469	1.3	271	1.5	235	0.9	294	1.1

^{1/} Data for total U.S. population and regional breakdowns based on estimates by Stanford Research Institute

^{2/} 1955 to date Winter-Spring-Summer seasons.

Source: Matson Records; Stanford Research Institute, "Population Trends in the United States Through 1975," August 1955.

The most significant traffic gains have been made from the North Central States, with higher farm income, larger industrial payrolls, and greater ability to satisfy their travel desires (especially in winter) than ever before. The proportion of Lurline passengers from these states is not far under their proportionate share of the total U. S. population. California, of course, participates in Lurline traffic more than five times as much as its proportion of U. S. population. Achieving "par" with population distribution does not in any sense place a ceiling on travel from that state or region. Substantial gains have also been made in the numbers and proportions of visitors from the populous but distant Middle Atlantic States, but here the ratio to the total visitors is only half that of population. Despite the costs and distances involved in traveling to Hawaii from regions east of the Rockies, Hawaii's (and particularly the Lurline's) market has increasingly become a national market while still benefiting greatly from the population and economic growth of California.

The regional origins of upper-income-group visitors to the three Pacific States as compared with origins of Hawaii visitors excluding the Pacific States are shown in the following tabulation in percentages of the total visitors (1954):

Region of Origin	To Pacific States	To Hawaii	
		HVB Data ^{1/}	Matson
Mountain	25.2%	13.4%	13.4%
West North Central	19.6	13.6	13.2
East North Central	22.7	30.4	33.2
West South Central	9.8	8.5	9.8
East South Central	2.5	1.8	1.8
Middle Atlantic	12.3	19.6	17.7
New England	1.8	5.1	3.9
South Atlantic	6.1	7.6	7.0
Total	100.0%	100.0%	100.0%

^{1/} Hawaii Visitor's Bureau data.

The lower relative popularity of Hawaii compared with the Pacific States by visitors from the Mountain States is understandable in view of the proximity of the two groups of states, which makes possible a large number of short-stay, low-income visitors in the Pacific States. The same is true, to a lesser extent, of the West North Central States. The greater relative popularity of Hawaii on the part of residents of the East North Central States is very interesting, as is that of the Middle Atlantic group. The reasons why Matson had a higher participation in travel to Hawaii from the East North Central States than might be expected, based on origins of all visitors to Hawaii, and a lower participation from the Middle Atlantic and New England regions, are worthy of a more detailed analysis. The time factor may be important; also the greater convenience and cheapness of the West Indies for those interested primarily in a sea trip may be contributing factors.

Transportation and Other Costs

Hawaii is at a definite disadvantage compared with Europe, the West Indies, and South American vacation areas for persons living east of the Rockies (see Table II and Figure 6) so far as transportation costs are concerned. In the event of unfavorable national economic developments, Hawaii may be more susceptible to lower-cost attractions of other areas. This transportation disadvantage is increased by the tax applying to travel between U. S. locations and the lack of convertibility of dollars to depreciated currencies for destination spending.

Offsetting these factors is the far-sighted policy of Hawaiian hotels and merchants in maintaining reasonable rate and price structures on a year-round basis. Hawaii's inimitable climate which makes it equally desirable throughout the year is probably a basic reason for this pricing policy, for Hawaii's visitor influx shows less seasonality than that of most other major resort areas, and particularly than those overseas.

Competitive Areas

Although each vacation area is competitive with every other to a certain extent, there is no real competition for Hawaii in the Pacific region. This is particularly true for those persons who desire the relaxation of a sea voyage as part of their holiday experience. There is no service to tropical Mexico, and the West Indies are relatively too remote to attract West Coast residents. Even if future cruise service were available to Acapulco, it is the consensus of travel agents that the type of persons who now favor Hawaii would still do so because of the

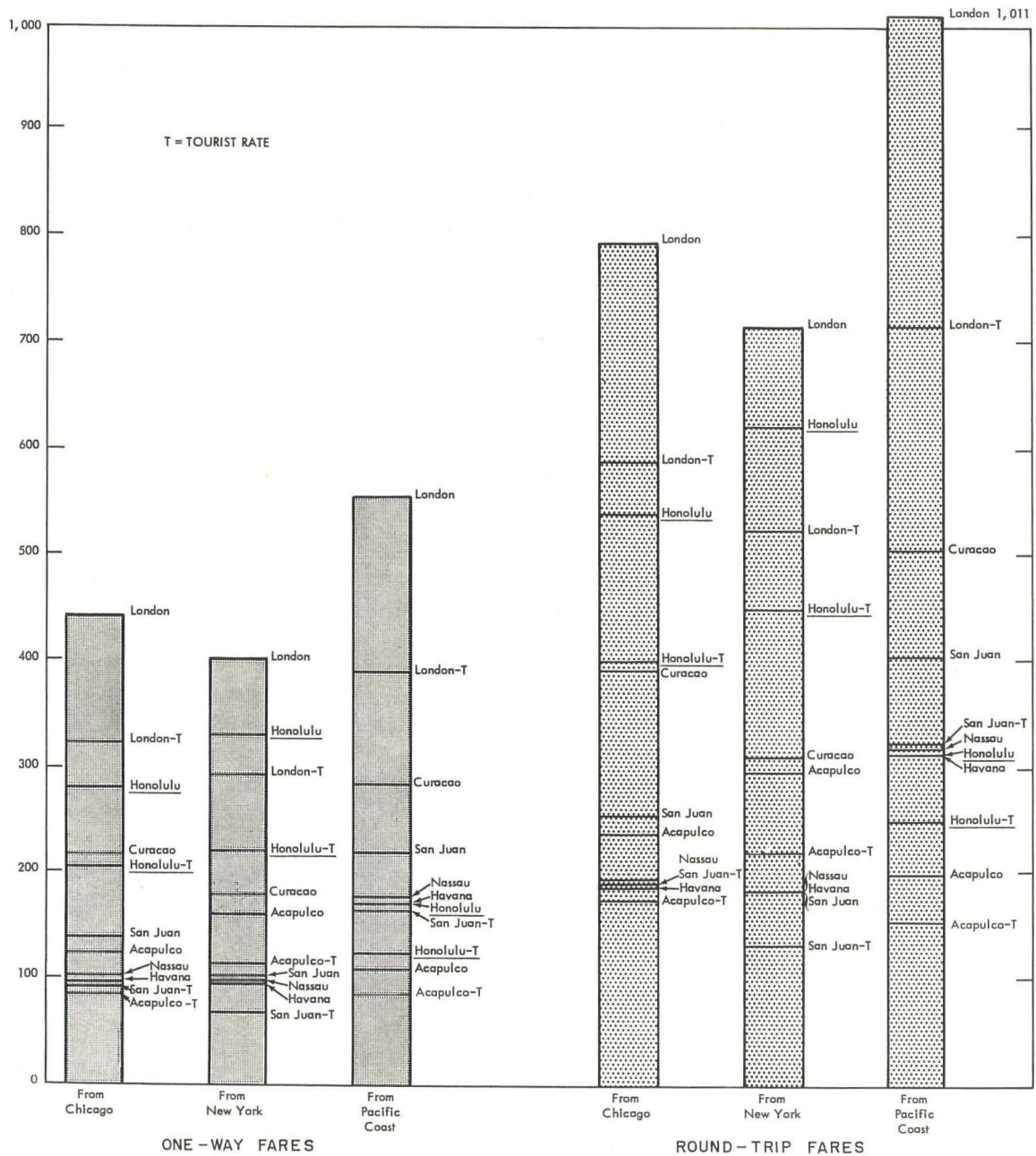
Table II

AIRLINE DISTANCES AND FIRST CLASS ONE WAY FARES
FROM SELECTED CITIES TO HAWAII AND JAMAICA

City	Mileage		Fare ^{1/}	
	Hawaii	Jamaica	Hawaii	Jamaica
San Francisco	2,400	3,180	\$168.00	\$210.80
Los Angeles	2,558	2,872	168.00	210.80
Seattle	2,736	3,331	168.00	210.80
Denver	3,356	2,309	239.60	180.75
Kansas City	3,907	1,921	269.80	149.90
St. Louis	4,137	1,797	276.55	138.30
Dallas	3,803	1,627	265.90	135.50
Houston	3,959	1,493	258.00	124.00
New Orleans	4,240	1,190	275.80	104.00
Chicago	4,256	1,775	282.80	142.20
Minneapolis	4,050	2,125	266.25	167.45
Detroit	4,475	1,771	298.00	140.60
Cleveland	4,563	1,680	301.80	140.00
New York	4,980	1,689	326.90	136.00
Boston	5,124	1,873	335.60	148.15
Washington	4,856	1,511	317.40	128.30

^{1/} Not including taxes.

Source: Official Airline Guide.



Note: Fares Indicated do not include tax which applies to travel between American points.
Source: Appendix Table V.

C-1542-6

Figure 6

COMPARATIVE AIR FARES FROM CERTAIN AMERICAN CITIES TO
VARIOUS OVERSEAS AND FOREIGN TRAVEL OBJECTIVES

language, sanitation, visa, and other psychological barriers to Mexican travel. Younger and more adventurous people who seek the experience of a foreign country do not now travel to Hawaii in large numbers.

For residents of eastern and northern states, the West Indies of course offer an attractive alternative to Hawaii at cheaper cost. Yet these time and expense factors have not thus far precluded large numbers of them from favoring Hawaii, which offers the "plus" of a trip to California as well as the advantages of the Islands. It seems clear that in the economy of the future there will be ample numbers of persons to strengthen the tourist economies in both the Pacific and Caribbean regions. Furthermore, as Hawaii becomes an increasingly possible destination through the provision of more transportation and hotel facilities, it may be expected to attract increasing numbers of people who now visit southwestern desert resorts. The number of Arizona's winter visitors declined 3 percent in 1953 and another 5 percent in 1954, during both of which years Hawaii's winter volume substantially increased.

Consideration has been given to the possibility that the opening of more remote islands of the South Pacific, such as Tahiti, will reduce the numbers who make the trip only as far as Hawaii. However, the distance and time involved as well as the added expense of such cruises seem to indicate that they will not be seriously competitive. People who go to Tahiti may well stop over in Hawaii, but they will not go there instead of Hawaii. On this point, travel agents consulted are unanimous.

In the 1954 Stanford Research Institute report, considerable attention was devoted to Florida and the West Indies. It is interesting to note that since then travel to Florida has increased considerably, but 72 percent of Miami visitors travel by car, and 19 percent by plane. More than half of them are short-term vacationers staying between 4 and 13 days, with a median stay of 7 days--just half of that of Hawaii visitors. Only 4 percent are seasonal visitors with over 30 days of stay, compared with 12.3 percent in Hawaii. Nearly half of all tourists to the Miami area originated in the largest eastern cities with populations of over one million, and an additional 10 percent came from metropolitan areas with populations of more than half a million. Nearly 40 percent originated from the Middle Atlantic States.

The tabulation on the following page compares origins of Florida tourists (the West Indies doubtless have a similar regional composition) with those of Hawaii visitors. These are further compared with the percent of U. S. population by regions and with the percent of U. S. family units with more than \$4,000 annual income.

Region of Origin	Florida	Hawaii	Population	Family Units With Over \$4,000 Annual Income
New England	7.12%	2.3%	6.10%	6.46%
Middle Atlantic	37.99	8.8	19.52	22.79
East North Central	27.48	13.7	20.18	23.97
West North Central	5.34	6.1	9.04	8.40
South Atlantic	12.01	3.4	14.29	10.35
East South Central	3.86	0.9	7.25	3.69
West South Central	3.34	3.9	9.65	7.58
Mountain	.67	6.0	3.57	3.53
Pacific	2.24	54.9	10.38	13.23
Total U.S.	100.00%	100.0%	100.00%	100.00%

Hawaii and Florida are essentially noncompetitive so far as visitors from the Mountain-Pacific and Northeastern States, respectively, are concerned, although Hawaii has penetrated the market in the latter area more successfully than Florida has in the former. The West is growing faster than the East; some authorities are predicting that California's population will exceed New York's by 1965 and possibly by 1960. Population figures alone understate the western states' growth rate because of their relatively faster industrial and income growth. Hawaii should maintain and extend its present advantage due to its proximity to the West Coast. At the same time, it has an opportunity for greater penetration in the large market east of the Rockies.

Miami tourists also spend less than do those to Hawaii. The median daily expenditure is given as \$10.40 per person on a yearly average basis. The grouping of daily expenditures is not far different from those of other tourist areas. Of course, winter visitors to Florida spend more than do those in summer, and probably relatively more--compared with the annual average--than do winter visitors to Hawaii where seasonal cost differentials and spending trends are less pronounced than in most other areas. But, on the average, Hawaii vacationists are able to and do spend more than those who go to southeastern and Caribbean resorts.

Approximately one-half of the Florida visitors are over 40 years old, children under 19 represent 12 percent of the total, and persons between 19 and 40 years, 38 percent. By comparison, only 8.4 percent of Hawaii visitors are 19 or under, those from 20 to 39 represent 26.5 percent of the total, and the over-40 group accounts for 65 percent.

Note: Data on Florida and Caribbean-area tourists are available through courtesy of University of Miami, Bureau of Business and Economic Research.

Less than two-thirds of Florida visitors are first-time visitors, whereas Hawaii "repeat" visitors account for approximately 25 percent of its total.

It is apparent from all these comparisons that the composition of Hawaii visitors is considerably different in several pertinent respects--origin, age, time to spend, affluence, and mode of travel--than that of Florida visitors. These factors tend to minimize the competitive aspects of the two regions.

Travel to the West Indies in 1954 showed mixed trends, with some areas showing increases, and others decreases. One of the main problems was the difficulty of maintaining tourist volume through the summer months. Winter tourism to these islands, however, showed sharp increases in the 1954-55 season, the result of new and better hotel accommodations, more frequent air schedules, and a larger fleet of seasonal cruise ships in service. The Puerto Rico Chamber of Commerce reports the visitors on that island reached a new peak of 145,000 in 1954 and spent \$22 million. The 1947 total was only 40,000.

Hawaii's tourist volume increases in 1954 and 1955 have been in line with the general trend insofar as winter travel is concerned, but its ability to gain summer travel business has been outstanding.

Another indication of the uniqueness of Hawaii vacation travelers is found in the differences between attendance figures at the Hawaii National Park and that of western parks in the continental United States. Visitors to the latter have increased from 8 million to 11 million since 1949, or 42 percent, and the growth curve has been remarkably steady each year. Visitors to Hawaii (both directions, staying two days or longer) have increased from 34,386 to 91,287, or 165 percent, during this period. But visitors to the Hawaii National Park have increased only from 350,504 to 444,551, or 27 percent. The peak figure, 694,632, was reached in 1952, after which there was a sharp decline to 416,942 in 1953, and a modest recovery in 1954.

The low correlation between Hawaii travel and Hawaii National Park attendance confirms that Hawaii appeals to a different type of visitor than do the national parks. Apparently most of the Park's visitors are either local residents or military personnel. The relatively low proportion of civilian tourists who visit the Park is evident from the lack of facilities for their accommodation on the island of Hawaii.

So long as increasing numbers of Americans have the time and the money necessary to visit Hawaii, there is every indication that more

and more of them will continue to do so. They will also plan to stay longer once they have arrived than is their custom when visiting other places. Hawaii, to a degree not found elsewhere (except for Europe), is a vacation end in itself for a large and growing number of Americans. Other vacation areas, both on the Mainland and in such foreign regions as the Caribbean, Latin America, and Asia, will doubtless prosper increasingly, but they do not yet afford real competition for Hawaii and may not be expected to do so if Hawaii provides the facilities for a Hawaii-type vacation for the people who desire to visit it.

The Position of California and the Three Pacific States

As noted in Table I, California's relative position as the principal source of Hawaii tourists has declined steadily since the end of World War II. This has been caused to some extent by the increased interest in Hawaii by residents of more remote regions and by the lack of transportation to or facilities in Hawaii to satisfy the demand. California travel agents confirm the continuing great interest of West Coast residents in Hawaii vacations and, in particular, the desire of Californians for more opportunity to take sea trips. With the rapid growth in population and income of the Pacific States (greater than for any other region of the United States) the demand for Hawaii cruises from West Coast residents should continue to rise proportionately. There is no reason to believe that it will not, and there is no evidence that Californians will transfer their desires to other regions unless they are forced to by the lack of facilities in Hawaii.

Section VII

SEASONAL FACTORS

It is estimated that from 40 to 60 percent of American tourists take their vacations in the three summer months of June, July, and August. The middle- and higher-income families, particularly, provide a rapidly expanding market for year-round travel, as evidenced not only by the steadily increasing popularity of other seasons for Mainland vacations, but also by the fact that overseas travelers—especially pleasure travelers—are less "seasonal" than Mainland tourists. This is particularly true in Hawaii where the difference in numbers of visitors between the low (first) quarter and the high (third) quarter is only about 20 percent.

This fluctuation in numbers is compensated to a considerable extent because first quarter visitors tend to stay longer and spend more than their summer counterparts. There is considerable evidence, however, pointing to an increased seasonality for Hawaiian tourism in the future. At least a part of Hawaii's relatively high proportion of off-season visitors in the past has been due to the lack of accommodations to serve the number of persons who desired to but could not visit the Islands during the usual vacation months in the summer. As facilities become available to service peak demands, it will require still greater efforts to maintain reasonably high occupancy rates and load factors during the off-seasons.

The airlines have already begun to experience this seasonal fluctuation despite their greater ability to adjust the number of flights to the demand for space. The following tabulation sets forth the seasonal load factors (passengers carried expressed as a percent of total seats or berths) of United Airlines in the California-Hawaii service, and of Pan American's Pacific Division, compared with the Lurline's seasonal experience in 1954 and 1955.

Month	United 1954	Pan American 1954	Lurline	
			1954	1955
January	68.9%	57.0%		
February	70.8	59.7		
March	67.9	59.0		
Seasonal average	69.2	58.6	89.4%	91.7%
April	73.7	60.6		
May	67.8	60.1		
Seasonal average	70.8	60.4	92.8	96.8
June	83.9	69.8		
July	82.1	68.6		
August	88.3	70.6		
Seasonal average	84.6	69.7	102.9	104.7
September	76.4	68.9		
October	77.6	65.0		
November	61.8	62.1		
December	69.7	64.9		
Seasonal average	71.4	65.2	90.3	94.3
Annual average	74.9	64.3	94.0	96.9
Seasonal low as percent of seasonal high	80.1%	84.0%	86.9% ^{1/}	87.6% ^{1/}

The airline experience is not necessarily representative of what might be expected of surface transportation if it were available in sufficient supply to meet the demand. If ships were provided to meet a seasonal peak demand, lower off-seasonal load factors would be expected than for the airlines unless a ship were withdrawn from service or used for cruises to other ports during low-demand months. On the other hand, it is not anticipated that it would be economically feasible to provide for such peak requirements, so the seasonal load factor fluctuation would be related to the extent to which peak requirements were met. It would also, of course, depend on the success with

^{1/} If the unrepresentative low inbound load factors in January were reduced, this percentage would increase appreciably.

which off-season business could be developed through the promotion of "package tours," conventions, and special events. These would require the cooperation of other interests in the Islands, but such coordinated effort should be forthcoming as the off-season hotel occupancy rates decrease. Finally, seasonality can be reduced by providing seasonal rates if that should prove necessary.

Table III shows the strikingly different geographic origins of Hawaii pleasure visitors by quarters as compared with annual totals. The proportionately much greater participation of persons with business, managerial, and official occupations in the winter season (first quarter) totals, and of clerical, office, and sales personnel in the summer (third quarter) are also noteworthy. Retired people, on the other hand, provide a proportionately better source for second and fourth quarter volume, and the proportion of teachers and professors who make the trip in the spring is higher than their annual participation, as is also the case with students. Professional and semiprofessional group participation in both off seasons (spring and fall) exceeds their annual average participation.

Promotional activities designed to reduce seasonal fluctuations should take such origin and occupation information into consideration to be most effective.

Table III

REGIONAL ORIGIN OF WESTBOUND VISITORS TO HAWAII WHO STAY TWO DAYS OR LONGER
 COMPARED WITH ORIGIN OF U.S. TRAVELERS TO EUROPE
 (Total Number and Regional Percentages--Annually and by Quarters)

Origin	Total U.S. Population ^{1/} 1955	Visitors to Hawaii																		U.S. Travelers to Europe 1952
		1955		1954					1953					1952					1951 Total	
		May	Feb.	First	Second	Third	Fourth	Total	First	Second	Third	Fourth	Total	First	Second	Third	Fourth	Total		
Total Number Percent of Annual Total		5,873 22.8%	7,242 26.4%	16,980 27.3%	19,692 26.4%	20,312 27.3%	17,468 23.5%	74,452 100.0%	14,836 22.4%	17,552 26.5%	18,376 27.7%	15,532 23.4%	66,296 100.0%	12,856 26.0%	12,120 24.5%	11,364 23.0%	13,092 26.5%	49,432 100.0%	43,426	
Total United States Percent of Annual Total	164,991 100.0%	5,703 21.8%	6,840 27.0%	15,408 21.8%	19,112 27.0%	19,776 27.9%	16,488 23.3%	70,784 100.0%	13,892 22.0%	17,132 27.1%	17,664 28.0%	14,492 22.9%	63,180 100.0%	12,024 25.4%	11,664 24.6%	11,096 23.4%	12,564 26.5%	47,348 100.0%	41,824	100.0%
Total United States--Percent	100.0%	97.1%	94.4%	95.3%	98.3%	97.9%	94.9%	96.7%	94.5%	98.2%	97.7%	95.7%	96.6%	94.2%	97.8%	97.9%	96.2%	96.4%	96.7%	
New England States	6.1	1.8	3.8	3.3	1.6	2.1	2.2	2.2	2.8	2.1	1.6	1.8	2.0	2.3	1.0	2.4	1.6	1.8	1.6	8.9
Middle Atlantic States	19.5	6.3	11.7	9.6	7.2	8.0	9.4	8.5	8.0	6.0	7.2	7.9	7.2	9.2	5.9	7.0	6.1	7.1	7.0	52.5
East North Central States	20.2	10.0	19.9	18.8	11.9	10.5	12.5	13.2	18.5	11.4	11.9	12.8	13.4	20.3	9.5	9.9	11.9	13.0	11.3	17.8
West North Central States	9.0	3.6	11.0	9.6	4.0	5.2	5.3	5.9	10.2	4.8	3.9	5.4	5.9	7.0	3.3	3.6	4.7	4.7	4.6	2.4
South Atlantic States	14.3	2.6	3.0	2.8	3.5	3.8	2.9	3.3	2.2	2.3	3.8	2.3	2.7	2.3	2.4	3.3	2.4	2.6	2.6	6.4
East South Central States	7.2	1.1	0.7	0.7	1.2	0.8	0.6	0.8	1.0	0.9	1.1	0.7	0.9	1.1	0.6	1.7	0.4	0.9	0.8	
West South Central States	9.6	3.5	2.8	2.3	4.4	4.9	2.9	3.7	1.9	3.3	5.1	2.1	3.2	2.5	2.7	4.0	2.2	2.8	2.6	
Mountain States	3.6	3.3	7.0	7.9	5.1	4.8	5.5	5.8	7.2	4.5	4.0	6.7	5.5	7.5	4.8	4.3	5.5	5.6	4.6	9.8
Pacific States	10.5	67.5	39.2	39.7	59.0	57.6	52.9	52.9	42.4	62.2	58.9	55.4	55.3	41.7	67.4	61.2	61.4	57.7	61.1	
Washington	1.6	5.2	10.0	8.2	5.2	4.3	8.3	6.4	7.3	4.1	2.7	6.7	5.0							
Oregon	1.0	2.3	6.3	4.4	2.5	2.0	2.9	2.8	4.9	2.3	1.3	3.5	2.9							8.2
California	7.9	60.0	22.9	27.1	51.3	51.3	41.7	43.7	30.2	55.8	54.9	45.2	47.3							
U.S. Territories		0.5	0.6	0.7	0.4	0.2	0.6	0.4	0.3	0.7	0.3	0.5	0.4	0.3	0.2	0.5	—	0.2	0.4	
Canada		1.2	4.2	4.3	1.0	0.8	3.7	2.3	5.1	1.1	1.1	2.4	2.3	5.0	1.5	1.0	3.3	2.8	2.2	
Other Foreign		1.3	1.4	0.4	0.7	1.3	1.3	0.9	0.4	0.7	1.2	1.9	1.1	0.8	0.7	1.1	0.5	0.8	1.1	

^{1/} Data for total U.S. population and regional breakdowns based on estimates by Stanford Research Institute.

Sources: Hawaii Visitors Bureau; Survey of Current Business, U.S. Department of Commerce, June 1953; Stanford Research Institute, "Population Trends in the United States Through 1975," August 1955.

Section VIII

ANTICIPATED GROWTH OF HAWAIIAN TOURISM

Total Traffic

Stanford Research Institute's previous estimate of the growth of Hawaiian tourism, prepared for Matson in July 1954, projected total Hawaii-Mainland and local traffic (both directions) of 370,000 persons by 1975, or 185,000 persons in each direction. This figure was the average of four projections of actual traffic to and from Hawaii over a number of years based on historic trends and projected increases in disposable income for the nation and the Pacific States.

The conservatism of this estimate was stressed at that time. Actual travel to Hawaii during the past two years (1954 and 1955) has so far exceeded the projections for those years, based on the formulas used and applied to travel through 1953, that it is apparent the Institute estimates were even more conservative than anticipated.

Applying similar formulas (set forth in the notes to Appendix Table VI) to actual travel (both directions) through 1955 results in the following revised projections of the total number of trips in the Hawaii-Mainland local traffic:

Estimate	Original	Revised
A	761,800	938,400
B	432,700	612,200
B ¹	430,000	543,300
C	327,700	513,200
D	292,300	376,700
Average of B, B ¹ , C, and D	<u>370,000</u>	<u>510,000</u>
Number Travelers (1/2)	185,000	255,000

In 1953 there were 178,427 Hawaii-Mainland local trips. Applying the projected annual increase (on a straight-line or equal annual increment basis) of 8,700 trips would have resulted in approximately 187,000 for 1954 and 196,000 for 1955. Actual trips in 1954 totaled

195,092, and the total for 1955 (based on actual carryings for available months) will approximate 230,000--a total not anticipated until 1959 under the formulas previously used.

Applying similar formulas based on actual trips through 1955 results in estimated annual increments of 14,000 trips, or 7,000 persons. This compares with actual trip increases of 21,098, 15,011, 14,264, 43,102, 16,565, and 37,000 (estimated) for the years from 1950 through 1955, respectively.

Considering the higher incomes, increasing population, and greater propensity to travel discussed in previous sections, as well as the increasing favor with which Hawaii is viewed as a vacation area and the greatly expanded accommodations, both existing and planned, on the Islands, the conservatism of the revised estimates presented above is apparent. For example, they project only 370,000 trips, or 185,000 visitors, by 1965, compared with the Hawaii Visitor's Bureau goal (not a prediction) of 280,000 visitors by that date. A further element of conservatism is introduced in that the foregoing Institute estimates included all local passenger traffic between the Mainland and Hawaii (including that of Hawaii residents), whereas the Hawaii Visitor's Bureau figure includes only visitors to the Islands.^{1/}

^{1/} In the publication Hawaii's Visitor Industry, 1955-65, prepared by The Research Committee of The Hawaii Visitor's Bureau and The Tourist Industry Committee, it is stated that "A projection...based on the average annual increase in the number of tourists...throughout the period 1948-54...would be 185,000 visitors in the year 1965. This is a much more conservative figure but is too low because the annual numerical increase has been rising.

"In the view of the Research Committee, no 'rule of thumb' procedure is satisfactory. Underlying such an estimate there are gradually developing factors:

"1. As the visitor industry of Hawaii expands, it will absorb a growing percentage of the total visitor market, narrowing the remaining market for further development.

"2. To achieve growth, it will be necessary to appeal to families in middle income brackets. To such a family, a trip to Hawaii is generally a once-in-a-lifetime experience. At best there is an interval of several years before a return trip is made. Thus, as the volume of visitors rises, there will be an increasing number of

Accordingly, an alternative projection has been prepared, based on the number of westbound visitors staying two days or longer, on the theory (borne out by postwar experience) that Matson's future potential is overwhelmingly (perhaps as much as 95 percent) found in this category of travelers. Such data are available (postwar) beginning in 1951. They show annual increases of 6,984, 17,534, 9,236, and 13,612 (estimated) for 1952-55, respectively, or an annual average increase of 11,840 persons. This record has been achieved despite the shipping strike of 1952 and the slight economic recession of 1954, and so may be considered to be a reasonable average for estimating the future potential despite the short period of years on which it is based.

Assuming an average annual increment of 12,000 such visitors, a total of 335,000 is projected for 1975 and 215,000 by 1965. The 1965 estimate by this method should be reasonably accurate if economic conditions forecast are achieved, as seems likely precluding a war or other major interception. Data are available for too few years, and Hawaii tourism represents too small a portion of disposable income or total recreation and travel expenditures to give any statistical reliability to correlation analyses which would not reveal the psychological, competitive, and other factors which are increasingly important in the selection of vacation locales. Beyond 1965, the 12,000 annual increment may well be too small; nevertheless it is used since uncertainties affecting the future increase with the length of the projection.

There is evidence pointing to the probability of gradually increasing annual increments of westbound tourists to Hawaii. The increase in visitor numbers in 1955, the first year for which accommodations

potential visitors each year who will drop out of the market for at least a number of years.

"3. Other tropical islands in the Pacific are beginning to develop as tourist centers. As they expand, they will affect the rate of growth in Hawaii.

"... Estimating the growth... over a long period of time... using the average rate of growth during recent years... would result in a total of over 520,000 visitors...[by] 1975... and becomes an absurdity" (although it is used to determine the 1965 goal).

The Institute agrees with these concepts, and the conclusion that an accurate projection may well be bracketed within these two curves.

were reasonably available at Waikiki to meet the demand, and the underlying economic and social factors supporting the growth trend both support this conclusion. On the other hand, there is no definite assurance that Hawaii will continue to provide the kind of vacation experience for which it is now famous if it should not plan future facilities wisely. Neither is there present assurance that hotels will be built to provide accommodations for all those who would go. Increased seasonality will have an adverse financial effect on hotels and other facilities built to meet peak demands.

Therefore, it is considered that a reasonable projection of the Hawaii travel potential for 1975 is more nearly 335,000 westbound tourists to Hawaii only. The revised estimate of 255,000 for all travel of Mainland-Hawaii traffic, including tourists, residents, and business travelers is probably too conservative. Both projections are presented in this report, however, to show that acceptance of either of them will provide a sound basis for Matson's decisions with respect to another vessel of the Monterey type.

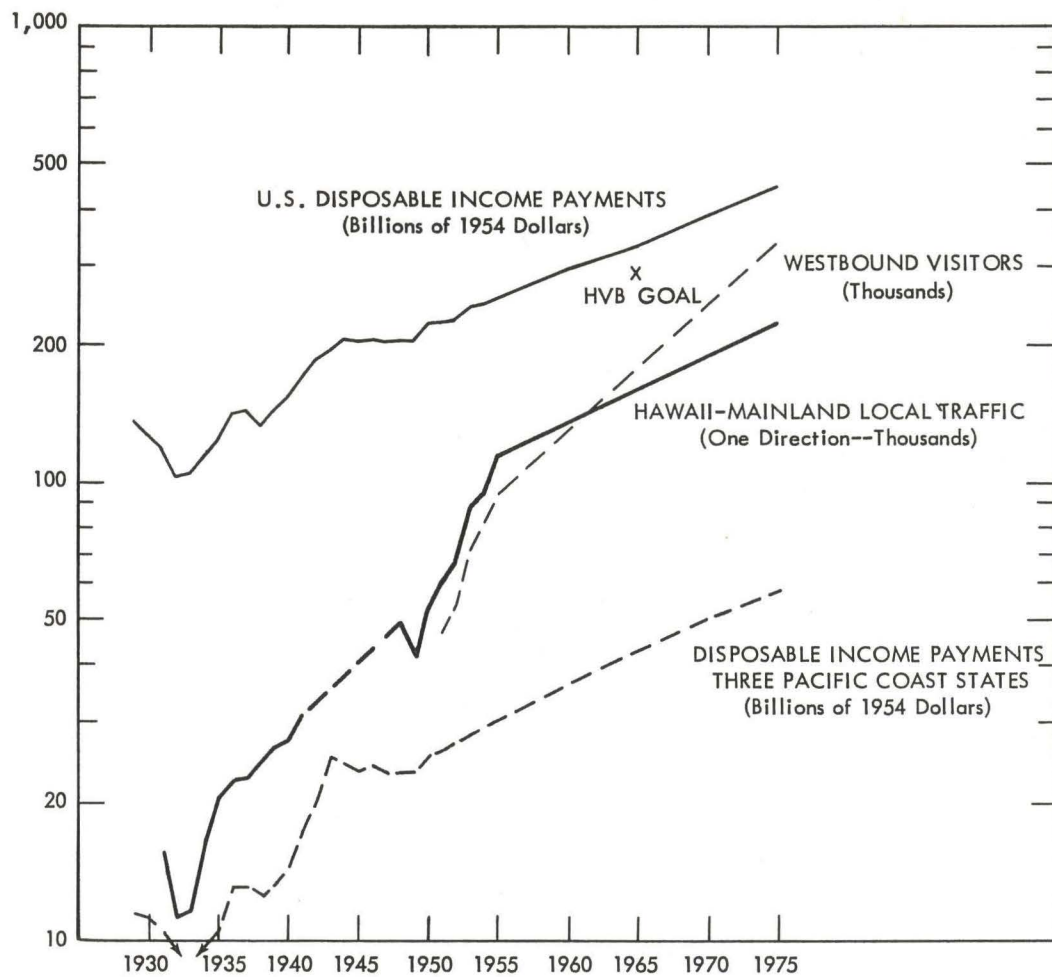
Expansion of the 335,000 figure to include all local Hawaii-Mainland travelers would, of course, result in a considerably higher travel total in each year. The lower figure is used because of the dominant position of the more restricted westbound visitors in local surface travel, and in order fully to compensate for any possible (but not anticipated) adverse effect of the new Australia-service ships on longer-stay Hawaii visitor totals. This means, of course, that any Hawaii-resident business obtained, or that from eastbound visitors, will not be included in the projections for sea travel discussed in the following paragraphs.

Figure 7 shows Hawaii-Mainland total and visitor traffic projections, plus United States and Pacific Coast disposable income payments.

Proportion of Travelers by Sea

As shown in Table IV, Hawaii travelers have continued to travel by sea practically to the full extent of outbound ship capacity. The large postwar increase in air travel, however, has reduced the proportion of those who travel by ship to 21.6 percent in 1954 and an estimated 18.9 percent in 1955.

It is also noted (Table I) that the Lurline's trade is increasingly from tourists, the number of Hawaii residents using Matson ships having declined from 32.5 percent of total carryings in 1947 to 4.5 percent in 1954.



Sources: Appendix Table VI for Hawaii-Mainland Local Traffic Projection and Disposable Income Data.
Table VI for Westbound Visitors Projection.

B-1542-7

Figure 7

PROJECTION OF LOCAL HAWAII-UNITED STATES MAINLAND
TRAFFIC COMPARED WITH DISPOSABLE INCOME PAYMENTS

Table IV

PERCENT OF ACTUAL PASSENGER LOAD TO
TOTAL PASSENGER CAPACITY OF LURLINE

	1955	1954	1953	1952	1951	1950	1949	1948
<u>Outbound</u>								
Winter	99.2	99.3	99.8	99.3	86.6	93.1	95.0	88.1
Spring	98.8	99.9	100.2	98.0 ^{1/}	87.2	96.6	96.2 ^{1/}	84.5
Summer	107.3	105.7	106.1	99.8 ^{1/}	103.8 ^{1/}	101.9	2/	102.7
Fall	<u>100.4</u>	<u>98.8</u>	<u>99.3</u>	<u>90.5</u>	<u>91.7</u>	<u>69.1</u>	<u>76.7^{1/}</u>	<u>83.8^{1/}</u>
Total	101.7	101.0	101.5	96.1	92.4	88.4	85.8	95.8
<u>Inbound</u>								
Winter	84.1	79.5	75.0	74.0	49.9	66.8	79.3	77.3
Spring	94.8	85.6	87.2	86.3 ^{1/}	60.3	85.7	87.1 ^{1/}	85.5
Summer	102.1	100.2	95.4	81.0 ^{1/}	81.6 ^{1/}	89.7	2/	99.3
Fall	<u>88.2</u>	<u>81.8</u>	<u>81.3</u>	<u>64.2</u>	<u>68.5</u>	<u>44.4</u>	<u>53.7^{1/}</u>	<u>56.4^{1/}</u>
Total	92.1	86.9	84.4	73.6	65.2	68.5	68.9	79.6
<u>Average</u>								
Winter	91.7	89.4	87.4	86.7	68.3	80.0	87.2	82.7
Spring	96.8	92.8	93.7	92.2 ^{1/}	73.8	91.2	91.7 ^{1/}	85.0
Summer	104.7	102.9	100.0	90.4 ^{1/}	92.7 ^{1/}	95.8	2/	101.0
Fall	<u>94.3</u>	<u>90.3</u>	<u>90.3</u>	<u>77.4</u>	<u>80.1</u>	<u>56.8</u>	<u>65.2^{1/}</u>	<u>70.1^{1/}</u>
Total	96.9	94.0	93.0	84.9	78.8	78.5	77.4	87.7

^{1/} Estimated to correct for voyages lost by strikes.

^{2/} All voyages lost by strike.

Source: Matson records.

The Lurline carried 21,100 outbound passengers in 1953 and in 1954, or over 29 and 25 percent, respectively, of the total westbound visitors to Hawaii reported by the Hawaii Visitor's Bureau. Considering both outbound and inbound trips of westbound visitors from the continental United States and Canada staying two days or longer in the Islands, the Lurline carried 35 percent in 1950, 32 percent in 1951, 24 percent in 1952 (a year in which strikes reduced the total carriage), 26 percent in 1953, and 23 percent in 1954. These are perhaps more accurate measures of the vacationing public's acceptance of ship travel to Hawaii than is the over-all 21.6 percent figure for all local traffic in 1954.

Comparing sea with air travel to various overseas areas, considerable regional variation is found, depending both on the length of trip and purpose of travel and upon the availability of ships versus air transport. Trans-Atlantic ships enjoy a higher share (57.3 percent in fiscal 1954) of the total available business than do other routes because of the larger number of ships available, but even here the demand for surface travel is indicated to exceed the supply considerably during the summer season.

Predicting the share of the Mainland-Hawaii business involves consideration of the composition of the travelers according to age, sex, income, purpose of trip, and time available, as well as availability of acceptable facilities and the relationship between sea and air fares. Favorable to travel by sea on this route are the high incomes, older age groups, vacation purpose, and time available to an increasing number of Americans, as discussed in Section III. It is apparent that the present low proportion of sea travelers is caused primarily by the lack of facilities for such travel rather than by the time and cost factors involved.

The airlines have increased the number of revenue passengers carried between Hawaii and the Mainland significantly since 1951, the first year for which figures are presently available. United's total in 1951 was 42,236, and in 1954, 68,860. Pan American's Pacific Division volume (two-thirds of its weekly Pacific Division flights are between Honolulu and the Mainland) increased from 82,328 in 1951 to 150,959 in 1954.

Approximately 74 percent of Pan American's eastbound passengers from Honolulu used tourist accommodations, and 26 percent used first-class. United's westbound percentages are doubtless similar, as are domestic flight percentages. It is apparent that most of the increased growth in airline traffic has been in the tourist-class flights, and that these flights have also attracted considerable numbers of other passengers who would have traveled first-class had tourist flights not been available. Many of the tourist-class air passengers are stated by

travel agents to be those who desire Royal Hawaiian or other above-average accommodations at their destination, but who do not believe that the "extras" offered first-class passengers are worth the cost differential, particularly for a brief overnight flight.

While international air travel has grown relatively faster than domestic since 1946 (219 percent by 1953 compared with 135 percent, respectively), it is significant that sea travel has also grown rapidly--by 230 percent--so that the proportion of sea travelers in overseas routes actually increased from 38.5 percent in 1950 to 39.3 percent in 1953. Sea travel has more than held its own despite the lack of ships to meet the full demand for surface travel.

In view of the success with which ships have maintained and increased their business on other routes and the tremendous backlog of potential surface travelers to Hawaii evident from analyzing Lurline bookings, travel agent requests, and the general economic factors affecting overseas tourism, it appears that the present artificially low percentage of sea to total travel on this route bears little relationship to what it would be if buyers of transportation space had a free and unlimited choice as to method of travel.

Accordingly, there appears to be no reason to change the estimated potential for sea passengers of 32.5 percent of the total by both sea and air presented in the Institute's previous report. The relationship between outbound (35 percent) and inbound (30 percent) appears conservative in view of the excellent progress Matson has made in increasing the Lurline's inbound load factor (see Table IV) from 85 percent in 1953 to 87 percent in 1954 and 92 percent in 1955. (The assumed 30 percent inbound ratio is based on an 84 percent inbound load factor compared with 100 percent outbound.)

Table V projects the number of sea passengers in the Hawaii-Mainland local traffic estimated by the formulas in the previous report, revised to include 1954 and 1955 actual experience, and applying the 32.5 percent surface participation. It shows that even in 1958 there would be a demand for 5,000 more passages than the Monterey and Lurline could provide.

Table VI projects the number of sea passengers, on the same participation basis, including only westbound two-day-or-longer visitors to Hawaii, using the more likely 12,000 annual increment forecast. Actually, the ratio of sea to total bookings should be higher for this group than for all local traffic, as the projection is based exclusively on Mainland tourists. The 32.5 percent average participation

Table V

PROJECTION OF NUMBER OF PASSENGERS IN HAWAII-MAINLAND LOCAL TRAFFIC
(Rounded to Nearest 1,000 Passengers)

	Actual 1954	Estimated Future Years (based on constant annual increments)					
		1955	1958	1960	1965	1970	1975
Total Trips	195,000	230,000	272,000	300,000	370,000	440,000	510,000
Each Direction	98,000	115,000	136,000	150,000	185,000	220,000	255,000
Surface Outbound: ^{1/}	22,000	40,000	48,000	53,000	65,000	77,000	89,000
Total Accommodations							
in Present Vessels	22,000	22,000	22,000	22,000	22,000	22,000	22,000
Lurline	21,000	21,000	21,000	21,000	21,000	21,000	21,000
Other Lines ^{2/}	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Net Shortage in Present Vessels	0	18,000	26,000	31,000	43,000	55,000	67,000
Surface Inbound: ^{3/}	19,000	35,000	41,000	45,000	56,000	66,000	77,000
Total Accommodations							
in Present Vessels	19,000	20,000	20,000	20,000	20,000	20,000	20,000
Lurline	18,000	19,000	19,000	19,000	19,000	19,000	19,000
Other Lines ^{2/}	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Net Shortage in Present Vessels	0	15,000	21,000	25,000	36,000	46,000	57,000
Surface Both Directions:	41,000	75,000	89,000	98,000	121,000	143,000	166,000
Total Accommodations							
in Present Vessels	41,000	42,000	42,000	42,000	42,000	42,000	42,000
Lurline	39,000	40,000	40,000	40,000	40,000	40,000	40,000
Other Lines ^{2/}	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Net Shortage in Present Vessels	0	33,000	47,000	56,000	79,000	101,000	124,000
Monterey Accommodations ^{4/}	-	-	42,000	42,000	42,000	42,000	42,000
Net Shortage in Projected Vessels	-	33,000	5,000	14,000	37,000	59,000	82,000

^{1/} 1955 and future years calculated at 35 percent of total traffic.

^{2/} Assumes no increased facilities by surface competitors, and maintenance of reasonable (but not necessarily present) fare differentials between air and surface transportation.

^{3/} 1955 and future years calculated at 30 percent of total traffic.

^{4/} Monterey capacity for 58 voyages = 44,544; assumed load factor (both directions) = 94 percent.

Table VI

PROJECTION OF NUMBER OF WESTBOUND VISITORS TO HAWAII
STAYING TWO DAYS OR LONGER
(Rounded to Nearest 1,000 Passengers)

	Actual 1954	Estimated Future Years (based on constant annual increments)					
		1955	1958	1960	1965	1970	1975
Total Visitors	81,000	95,000	131,000	155,000	215,000	275,000	335,000
Surface Outbound: ^{1/}	22,000	33,000	46,000	54,000	75,000	96,000	117,000
Total Accommodations in Present Vessels	22,000	22,000	22,000	22,000	22,000	22,000	22,000
Lurline	21,000	21,000	21,000	21,000	21,000	21,000	21,000
Other Lines ^{2/}	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Net Shortage in Present Vessels	0	11,000	24,000	32,000	53,000	74,000	95,000
Surface Inbound: ^{3/}	19,000	29,000	39,000	47,000	65,000	83,000	100,000
Total Accommodations in Present Vessels	19,000	20,000	20,000	20,000	20,000	20,000	20,000
Lurline	18,000	19,000	19,000	19,000	19,000	19,000	19,000
Other Lines ^{2/}	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Net Shortage in Present Vessels	0	9,000	19,000	27,000	45,000	63,000	80,000
Surface Both Directions:	41,000	62,000	85,000	101,000	140,000	179,000	217,000
Total Accommodations in Present Vessels	41,000	42,000	42,000	42,000	42,000	42,000	42,000
Lurline	39,000	40,000	40,000	40,000	40,000	40,000	40,000
Other Lines ^{2/}	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Net Shortage in Present Vessels	0	20,000	43,000	59,000	98,000	137,000	175,000
Monterey Accommodations ^{4/}	-	-	42,000	42,000	42,000	42,000	42,000
Net Shortage in Projected Vessels	-	20,000	1,000	17,000	56,000	95,000	133,000

^{1/} 1955 and future years calculated at 35 percent of total traffic.

^{2/} Assumes no increased facilities by surface competitors, and maintenance of reasonable (but not necessarily present) fare differentials between air and surface transportation.

^{3/} 1955 and future years calculated at 30 percent of total traffic.

^{4/} Monterey capacity for 58 voyages = 44,544; assumed load factor (both directions) = 94 percent.

nevertheless has been used to assure conservatism. Table VI also shows that the demand for sea travel by 1958 will exceed the combined Lurline and Monterey capacity.

Table VII shows the sea potential, based on the total westbound visitor projections in Table VI, at various assumed surface participation percentages. It shows that a 32 percent participation would be necessary to achieve a 94 percent combined (both directions) load factor for the Monterey in 1958, and with the Lurline average load factor remaining at 97 percent. The required participation would decrease steadily to 13 percent in 1975. This affords ample latitude for a possible decrease in the potential participation of surface transport in future years when total numbers of visitors reach substantially higher levels than at present.

These estimates are annual averages subject to seasonal variations as discussed in subsequent paragraphs on estimated seasonal load factors.

Jet Aircraft

Another factor that may affect future ship travel and therefore load factors, is the inauguration of jet aircraft service. There is much uncertainty as to when and to what extent jet aircraft will displace the present piston-engine planes. While they might be expected to be placed in service first on the highly competitive domestic and trans-Atlantic routes where the saving in time is more important than on the Pacific air lanes, sooner or later they doubtless will be used in long-distance service everywhere.

Pan American has ordered 45 jets, according to a recent announcement--20 from Boeing and 25 from Douglas. The former will have a seating capacity of 104 first-class or 125 tourist-class passengers, the latter 108 and 131, respectively. These totals are roughly twice the capacity of the planes presently in service. In 1955 Pan American's average passengers per flight from Honolulu to the Mainland varied from 26 in May to 41 in September, and the 1954 averages were similar. Flights in each direction varied from 97 in February to 142 in June. It is apparent that there is no present demand for larger planes or more frequent service, and that placing the jets on this route would require less frequent schedules or a much greater volume of business. Whether or not significant fare reductions could be made in order to attract this business is questionable; it is more likely that increases in the total travel demand are counted on to produce the load factors necessary for profitable operation.

Table VII

PROJECTION OF POTENTIAL SEA TRAVELERS TO HAWAII
(Based on Alternate Participations in Total Westbound Visitor Projections)

	Actual 1954	Estimated Future Years					
		1955	1958	1960	1965	1970	1975
Total Visitors	81,000	95,000	131,000	155,000	215,000	275,000	335,000
Total Trips (both directions)	162,000	190,000	262,000	310,000	430,000	550,000	670,000
Requirements for Surface Potential of:							
40%	65,000	76,000	105,000	124,000	172,000	220,000	268,000
35	57,000	67,000	92,000	109,000	151,000	193,000	235,000
30	49,000	57,000	79,000	93,000	129,000	165,000	201,000
25	41,000	48,000	66,000	78,000	108,000	138,000	168,000
20	32,000	38,000	52,000	62,000	86,000	110,000	134,000
Available Ships:							
Lurline	39,000	40,000	40,000	40,000	40,000	40,000	40,000
Monterey	-	-	42,000	42,000	42,000	42,000	42,000
Other Lines	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total	41,000	42,000	84,000	84,000	84,000	84,000	84,000
Net Vessel Shortage (average) at Indicated Participation:							
40%	24,000	34,000	21,000	40,000	88,000	136,000	184,000
35	16,000	25,000	8,000	25,000	67,000	109,000	151,000
30	8,000	15,000	(5,000)	9,000	45,000	81,000	117,000
25	-	6,000	(18,000)	(6,000)	24,000	54,000	84,000
20	(9,000)	(4,000)	(32,000)	(22,000)	2,000	26,000	50,000
Participation Necessary to Achieve 94 Percent L.F. with Monterey			32%	27%	20%	15%	13%

There is already a four-day advantage in actual travel time by air between Hawaii and the Mainland, so that the faster jet schedules (up to 600 miles per hour instead of 300, or 4 hours enroute instead of 8) will not in themselves divert business away from ships. In fact, there will be scheduling problems in the overnight service, particularly west-bound, as hours of both departure and arrival will be inconvenient. Night flights may be reduced, or present slower aircraft retained on those schedules, reserving the jets for daytime operation. They will be particularly advantageous in the eastbound morning flights because of the time differential, permitting later departure and desirable daytime arrival on the Mainland.

It must be remembered, however, that speed is not the essential ingredient for the large proportion of overseas tourists who prefer to travel by ships. Travel by air is not a particularly pleasurable experience, whereas travel by cruise ship is a vacation in itself. Travel agents believe that jet planes will not attract a larger proportion of tourists to use the air, and there appear to be good reasons, as brought forth in this study, supporting their conclusions. It is possible that the added convenience of jet aircraft schedules to business travelers will make it possible for the airlines to take more business from surface transport on the Mainland, and will deter Matson from regaining much, if any, of that travel already lost in the Hawaii-West Coast service. This factor is not decisive, however; the future of surface travel on the Pacific is the future of the more leisurely vacation travel market. That should not be affected by jets any more than by present slower aircraft.

In combination with more frequent sailings, domestic jet airliners may actually help the surface travel potential between the West Coast and Hawaii. They will make it possible for tourists to leave their homes in the eastern states in time to sail on the Lurline or Monterey that same afternoon, and on return to arrive home the same day they debark at San Francisco or Los Angeles. The Hawaii travel adventure, complete with sea voyage, will then be more convenient and accessible to persons living east of the Mississippi than at present. The saving in transcontinental time will be an inducement to ship travel. The ship travel market potential to Hawaii will become regionally more diverse than at present.

Inauguration of jet plane service to Hawaii is not anticipated until 1960 or 1961 at the earliest. By that time, the total travel potential should have increased sufficiently to offset any reduced ship participation caused by faster air schedules. No significant reduction in this participation is foreseen at the present time.

Estimated Seasonal Load Factors

From Table III it was noted that the quarterly breakdown of west-bound visitors (both sea and air) to Hawaii in recent years has been:

Quarter	1954	1953	1952
First	22.8%	22.4%	26.0%
Second	26.4	26.5	24.5 ^{1/}
Third	27.3	27.7	23.0 ^{1/}
Fourth	23.5	23.4	26.5
Total	100.0%	100.0%	100.0%

Lurline passenger statistics are not strictly comparable to the quarterly breakdown of westbound Hawaii visitors because of differences in numbers of departures, but outbound seasonal load factors are significant, particularly when compared with load factors of United Air Lines:

Season	Lurline (outbound)			United (both directions) 1954
	1955	1954	1953	
Winter	99.2%	99.3%	99.8%	69.2%
Spring	98.8	99.9	100.2	70.8
Summer	107.3	105.7	106.1	84.6
Fall	100.4	98.8	99.3	71.4
Annual Total	101.7%	107.0%	101.5%	74.9%

There is evidently greater seasonal variation in air travel than in travel by ship to Hawaii, although the variation based on over-all demand for surface transportation would be greater than these comparative figures indicate. The seasonality of demand for both sea and air travel may not actually be too different ultimately, but it is doubtful that it will ever show up in surface load factors because of the greater flexibility of air in meeting seasonal requirements and the expectation that enough ships may never be provided to meet peak seasonal demands.

^{1/} Distorted by strike and loss of six voyages in second and third quarters.

Seasonal load factor declines would be more severe during the first few years of a second vessel's operation than later, when even off-season demand increases because of growth in the total traffic potential.

Advertising, special cruise promotions, and special events (e.g., Aloha Week) will also reduce the normal expectation of seasonality.

Considering the conservatism of the travel forecasts submitted in this report, it is believed that outbound space requirements of both vessels in the winter and spring months during the first few years of the Monterey's operation would approximate 90 percent of the winter and summer full-load prediction. Certain individual voyages might, of course, fall below this high seasonal expectation, but the strong over-all demand is favorable to the maintenance of high load factors even from the outset.

Inbound seasonal load factors for the Lurline have been as follows:

Season	1955	1954	1953
Winter	84.1%	79.5%	75.0%
Spring	94.8	85.6	87.2
Summer	102.1	100.2	95.4
Fall	88.2	81.8	81.3
Annual Average	92.1%	86.9%	84.4%

The striking increase in inbound load factors in each season since 1953 is evidence of the demand for sea voyages to Hawaii, as it was achieved despite the handicaps of infrequent schedules and a natural tendency to prefer outbound passage if only one way can be used for surface transportation.

The Monterey would permit more frequent service and tend to increase inbound loads, particularly in the winter season. The Lurline's annual December lay-up adversely affects that season's experience, as its load factor normally would be expected to be high in view of the longer-staying, wealthier persons who visit the Islands in winter. The contrary tendency to lower inbound load factors would be anticipated in other seasons to the extent that total annual potential demand might be more nearly satisfied.

In 1954, 82.6 percent of Mainland round-trip ticketed passengers completed their trips by Lurline, compared with 80.7 percent in 1953 and 73.8 percent in 1952. The proportion of Island round-trip ticketed passengers using both halves of their tickets declined from 66.2 percent in 1952 to 56.1 percent in 1953, but increased to 66.6 percent in 1954. These comparisons may have been affected by the 1952 strikes, but the expectation would be that more than the present 82.6 percent of Mainland ticketed passengers would return by ship if more frequent service were offered, and that more Island round-trip and one-way tickets would be sold.

Inbound load factors in winter should approach 90 percent of outbound during that season, if another vessel were put in service (compared with 84 percent for the Lurline in 1955). In spring the ratio should also be at least 90 percent (it is now 96.0 percent for the Lurline). Summer experience (95.2 in 1955) suggests 95 percent of the outbound factor as a reasonable estimate with two vessels in service, and in the fall 85 percent is a reasonable minimum in view of the 88 percent achieved in 1955 with one vessel.

Both vessels may be expected to operate at seasonal capacity (winter and summer, outbound) from the beginning of the Monterey service. If the anticipated over-all annual demand materializes, it should be possible to build up off-seasonal factors for both vessels (average both directions) to 95 percent in spring and 90 percent in fall within the first two or three years of the inception of the combined operation.

These estimates do not take into account the effect the two ships in the Australia service may have on either outbound or inbound load factors. Like the present President service to the Orient, it is assumed they will accept passengers with Hawaii as their destination only if they are not fully booked for the longer voyage a few days before sailing time. Under these circumstances it would be anticipated that any local business they might obtain would be insignificant to the whole, as is the case with American President Lines at present.

Rate Structures

As pointed out in Matson's Lurline fare study dated October 14, 1955, Lurline fares are on a level, or slightly higher, on a per mile basis than the published rates of principal carriers in the trans-Pacific and trans-Atlantic routes. The Lurline traveler is also subject to a 10 percent federal tax not applicable between the United States and foreign ports.

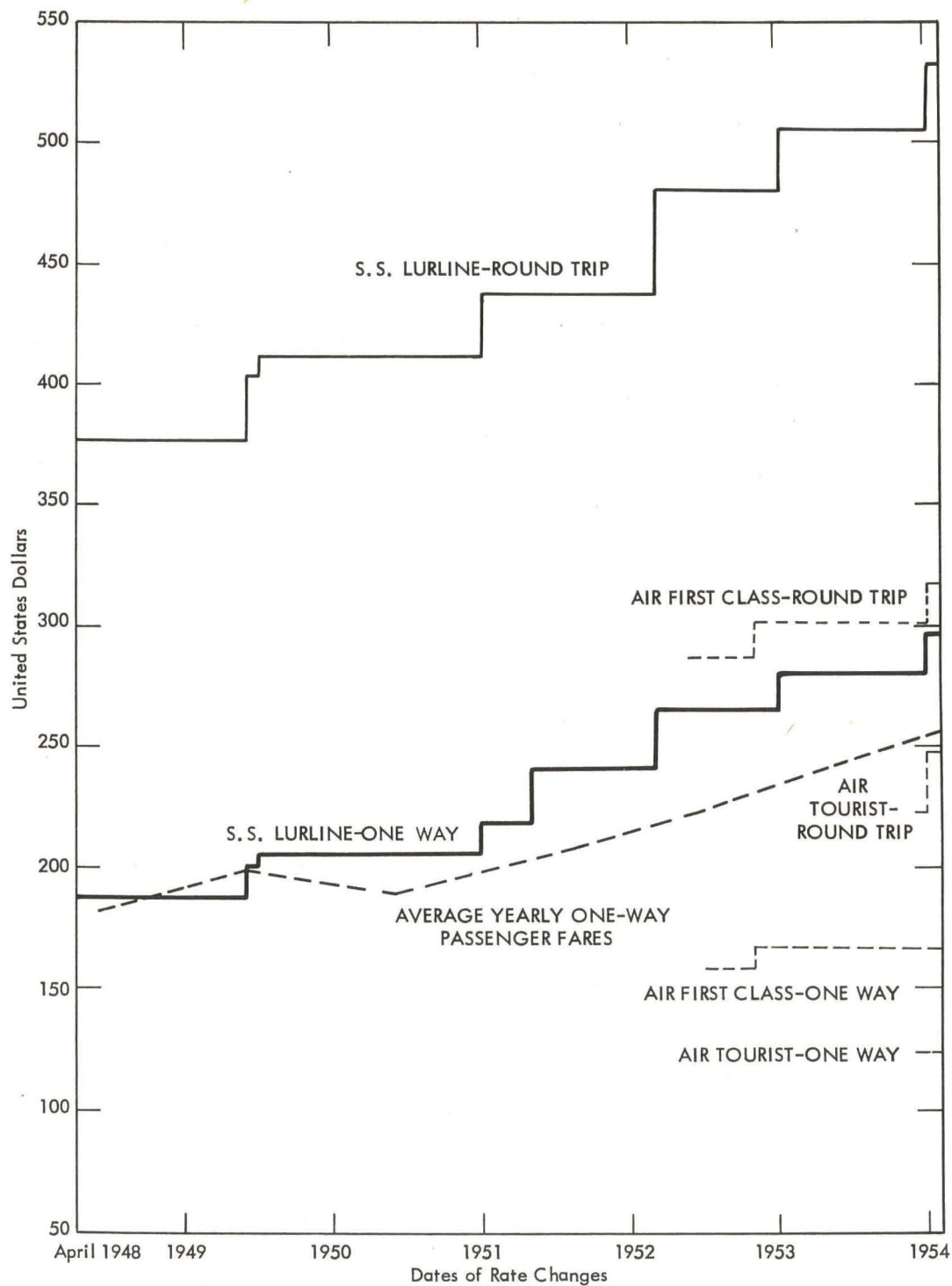
Furthermore, the Lurline (as is also true with other overseas routes) has direct competition from airlines at generally lower rates than those for surface transportation. However, it must be remembered that the ship traveler receives considerably more than mere transportation for his money, so that direct fare comparisons are not strictly valid.

It has also been pointed out in the Matson study that Lurline fares have been increased 51.53 percent on one-way trips and 42.4 percent including round-trip reductions since 1948. Figure 8 presents in chart form the weighted average Lurline rate structure compared with actual average fares and airline rates between Hawaii and the Mainland.

It is apparent from the more favorable load factors achieved in recent years that the present fare structure has not been detrimental to the achievement of highly satisfactory space sales. The proportion of space sales made to Mainland residents on vacation voyages has been increasing steadily. To what extent the present high fares relative to air transportation have caused the decrease in sales to Island residents and how much of this situation is caused by time and scheduling factors, is problematical in the absence of direct information bearing on this point.

In comparing Lurline with other surface travel, the higher incidence of pleasure travel on the Lurline and the over-all costs of Hawaiian versus other-area vacations, must also be considered. The Hawaiian travel market is different in important respects--geographical origin, age, purpose of trip, and average income of visitors--from that to Europe or Asia, as well as that to Caribbean and South American destinations. These differences all favor the maintenance of somewhat higher average fares on the Lurline, on a per-mile basis, than on other routes.

The strong and increasing demand for surface transportation to Hawaii by pleasure travelers at present rates confirms the previously cited surveys which show the relatively low emphasis on "cost" and the relatively high position of "pleasure" as a reason for choosing travel by ship rather than by air. Travel agents consulted also expressed the opinion that cost is definitely a secondary consideration among Hawaii-bound visitors (except, as previously noted, between first-class and tourist air flights), and that a continuing strong demand is anticipated for higher-priced accommodations. There is no evidence to date of any slackening in demand for superior accommodations among overseas travelers--either those on relatively short voyages, or on the longer cruises.



Source: Appendix Table VII.

B-1542-8

Figure 8

WEIGHTED AVERAGE LURLINE RATE STRUCTURE COMPARED
WITH ACTUAL AVERAGE FARES AND AIRLINE RATES

Table VIII
LURLINE AND MONTEREY RATE SCHEDULES
(Breakdown by Number of Rooms and Berths)

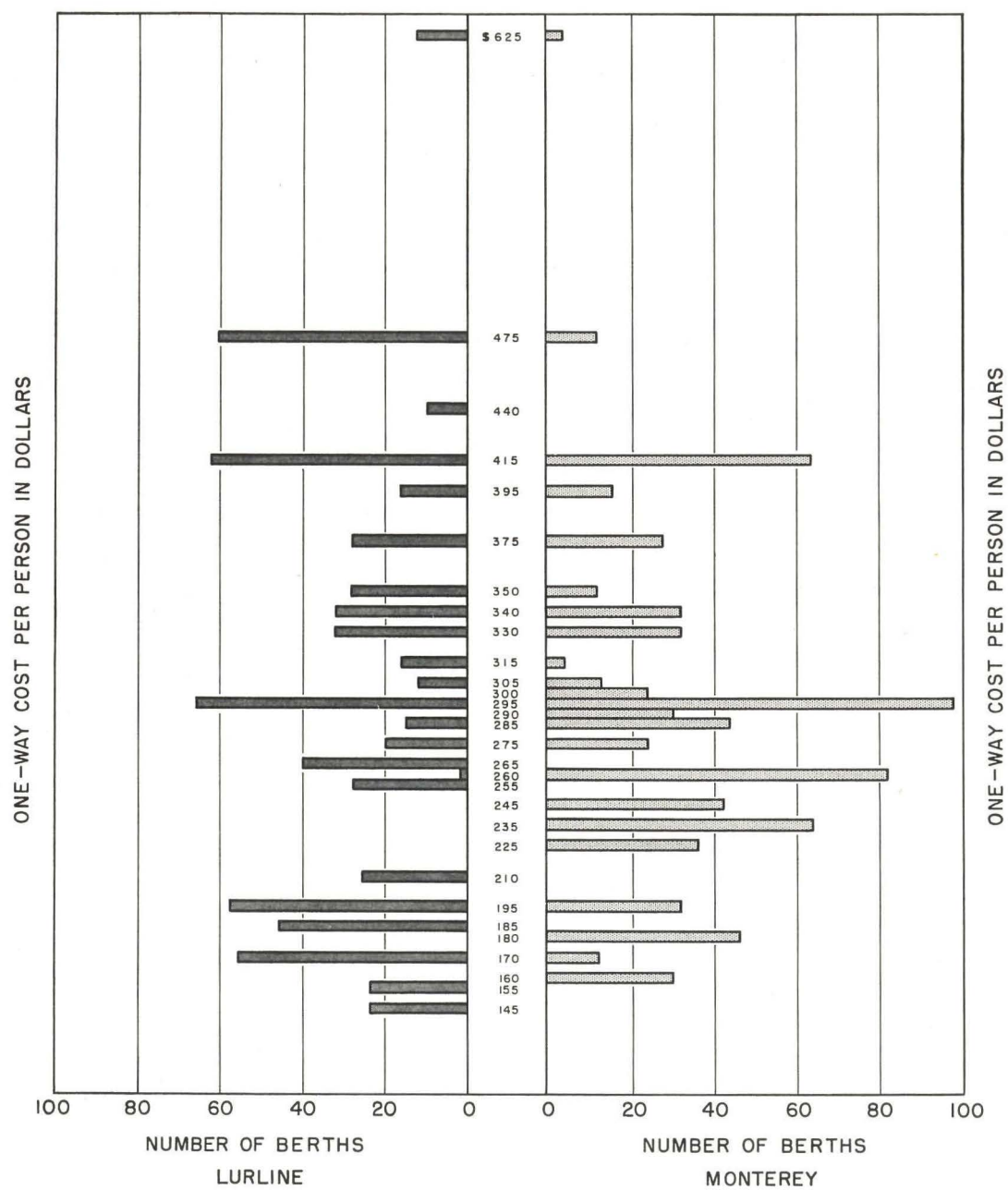
Type of Accommodation	Number of Rooms		Total Berths		Per Capita Rate (one way)	
	Lurline	Monterey	Lurline	Monterey	Lurline	Monterey
<u>With Private Bath</u>						
Lanai Suites	6	2	12	4	\$625	\$625
Deluxe Bedrooms	30	6	60	12	475	475
Deluxe Bedrooms	4	-	8	-	440	-
Outside:						
Singles	14	8	14	8	415	415
Doubles	24	28	48	56	415	415
Doubles	8	8	16	16	400	400
Doubles	14	14	28	28	375	375
Doubles	8	4	16	8	350	350
Doubles	16	16	32	32	340	340
Doubles	16	16	32	32	330	330
Doubles	8	2	16	4	315	315
Doubles	-	12	-	24	-	300
Doubles	-	4	-	8	-	295
Doubles	-	4	-	8	-	285
Inside:						
Singles	12	4	12	4	350	350
Doubles	6	6	12	12	305	305
Doubles	33	36	66	72	295	295
Doubles	12	12	24	24	285	285
Doubles	10	4	20	8	275	275
Doubles	20	8	40	16	265	275
Doubles	14	32	28	64	255	260
Doubles	-	32	-	64	-	235
Doubles	-	18	-	36	-	225
Outside:						
Triples	-	4	-	12	-	370
Triples	-	6	-	18	-	295
Triples	1	10	-	30	-	290
Triples	-	4	-	12	-	285
Inside:						
Triples	-	6	-	18	-	260
Triples	-	14	-	42	-	245
	255	308	484	648		
<u>Without Private Bath</u>						
Outside:						
Singles	2	-	2	-	260	-
Doubles	13	16	26	32	210	195
Triples	4	-	12	-	195	-
Doubles	8	-	16	-	185	-
Triples	12	4	36	12	170	170
Inside:						
Doubles	23	23	46	46	195	180
Triples	10	10	30	30	185	160
Doubles	10	-	20	-	170	-
Triples	8	-	24	-	155	-
Triples	8	-	24	-	145	-
	88	53	236	120		
Total Accommodation	343	361	720	768		

Source: Fare Study--S.S. Lurline, Passenger Traffic Department, Matson Lines.

If and when the Monterey enters service, it will effectively reduce to a considerable extent the backlog of demand for surface transport between the Mainland and Hawaii. That would not seem to be a propitious time to raise over-all fares on either vessel. On the other hand, this does seem to be an excellent time to experiment with fare readjustments. In view of the several factors herein discussed, it appears that consideration could be given to making fare readjustments in accordance with the following general principles:

1. An increase of approximately 10 percent applied to any given room rate would seem to be a reasonable maximum to institute at any one time. Demand for space should be closely watched to determine if and when further increases may be practicable.
2. Fare increases should apply to the lower end of comparable accommodation-type rates rather than to the higher-priced rates within each category.
3. The fare structure should be further simplified to the extent deemed feasible, in order to avoid disappointment of applicants in obtaining space within their budget expectations and to provide more space within the lower ranges.
4. Desirability of 5 or 10 percent seasonal fare differentials should be considered for future application if revised fares result in decreased off-seasonal load factors.
5. Rates for rooms with public baths should be increased less than those for private bath accommodations, as this lower-priced space is subject to more competition from airlines, particularly that of tourist-class flights.

It is noted (Table VIII) that generally similar rates are planned for equivalent space on both the Lurline and Monterey, but that the Monterey will have a larger number of lower-priced private bath accommodations and a smaller number of higher-priced accommodations (Figure 9) so that its average rate structure will be somewhat lower. This is believed to be correct, and in line with the second vessel characteristics outlined in the Stanford Research Institute report of July 1954. It may, however, result in some rate problems for passengers outbound on the Monterey who desire to return in equivalent space at the same rates on the Lurline. The latter vessel may not be able to accommodate them unless better space is down-rated. Careful attention to the rates of each vessel and to their proper coordination will be needed to avoid problems of this sort.



Source: Table VIII.

C-1542-9

Figure 9

COMPARATIVE RATE STRUCTURES
OF THE LURLINE AND MONTEREY

Present revisions of Lurline rates should consider not only present possibilities but should be made only after full consideration of the two-vessel rate structure that can be maintained in the future. Lurline rates alone might be well be considerably higher because of the inflexibility of demand than those for two vessels. Just how much higher they can be now is largely a question of judgment. It would probably not be wise, for public relations reasons, to raise them so high that substantial reductions would be required upon placing a second vessel in service. On the other hand, the total demand is apparently growing so rapidly that both vessels, by 1958 or 1960, may well be able to maintain rate structures that would be out of line if instituted for two ships at this time.

Practicable future steamer rates should also take into account any changes in airline rates, but there does not appear to be any necessary or fixed formula relationship between air and sea rates. The demand for surface travel appears to be both less elastic, and considerably larger under present and anticipated economic conditions, than formerly suggested. Very possibly basic fare differentials compared with air rates could be somewhat higher than at present without undue danger to load factors. In any event, the proposed Monterey rate schedules and proportions of rooms in the various price groups seem to be reasonable under present and anticipated economic and demand conditions.

No definite commitments as to future airline rate structures have been obtained, but further substantial reductions do not appear likely within the foreseeable future, except to the extent than an increasing proportion of tourist-class facilities may be provided. No doubt airlines will, however, make every effort to maintain present proportions of higher paying customers through provision of additional "extras." It is not believed that the cost of air travel, in the long run, will increase as much as may be required for ships. On the other hand, the essentially different reasons why persons choose one form of transport or the other will continue to be effective. If the national economy shows anticipated strength and growth and the demand for Hawaii vacations increases accordingly in line with present forecasts, there will still be ample demand for surface transportation to meet the requirements of at least a two-vessel service even though comparative rates diverge still further and the percentage participation of ships declines from the levels predicted as reasonable for the next few years.

Number and Size of Vessels Required

Tables V and VI present alternative projections of travel anticipated in the Hawaii-Mainland service through 1975 and the numbers

that reasonably may be expected to travel by sea. It is seen from these tables and from Figure 10 that there is an adequate margin of safety for the profitable operation of two vessels of the size and characteristics of the present Lurline and the proposed Monterey. It is also seen that, based on these conservative forecasts, the route could not support a third vessel until about 1963 when another ship carrying from 35,000 to 40,000 passengers a year (both directions) would be able to maintain a reasonably high load factor without reducing the business of the first two ships.

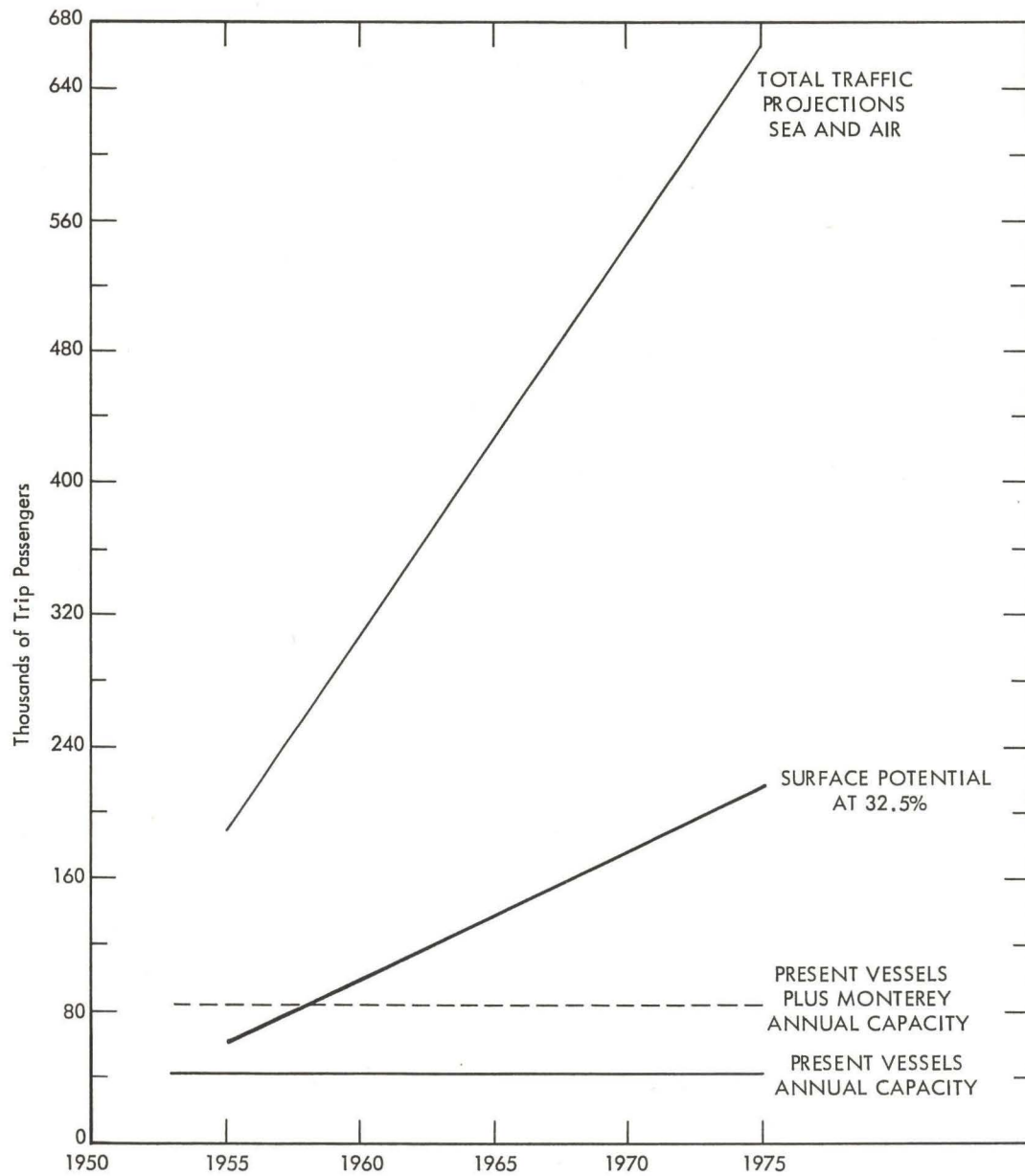
If the LaGuardia were placed in service by the Hawaiian Steamship Company at about the same time as the Monterey, it is apparent that the three vessels then operating would experience considerably reduced load factors for the first several years of their operation, as compared with a two-vessel service. It is doubtful if the LaGuardia's operators have the financial resources necessary to keep such a vessel in service if the load factors for each were approximately equal. On this basis each could anticipate factors of about 70 percent in 1958, 80 percent in 1960, and 95 percent (practically capacity) by 1965.

Since the LaGuardia would presumably have a lower average rate structure than either of the Matson vessels (\$215 compared with the present \$279 potential average^{1/} fare of the Lurline^{2/} and \$277 potential average^{1/} for the Monterey at the rates indicated in Table VIII), it is entirely conceivable that it could operate at higher load factors than the Matson ships. If the LaGuardia were able to attract some business from the airlines at these rates, it is possible, moreover, that air tourist fares would be reduced in order to maintain their loads at reasonably high levels, in which case the participation of the surface carriers in the total business might be expected to decline. All three vessels would then lose business unless the total volume increased substantially, and quickly, above the forecasts presented in this report.

On the other hand, Matson's reputation and experience should result in a definite competitive advantage over the LaGuardia, offsetting to some extent the lower fares. Certainly Matson would retain a large portion of the higher-priced business, thereby reducing--perhaps disastrously--the average revenues of the LaGuardia. It is unlikely that

^{1/} On basis of 60 percent of capacity at round-trip rates and 40 percent at one-way rates.

^{2/} Actual average Lurline fare was \$256 in 1954.



Source: Table VI.

B-1542-10

Figure 10

HAWAII-MAINLAND WESTBOUND VISITORS TRAFFIC PROJECTION
(BOTH DIRECTIONS)
1953 - 1975

the LaGuardia would be able successfully to compete with the airlines if it does so on a price basis alone for a significant share of its business.

This study has developed the fact that surface travelers to Hawaii are essentially different in composition from tourist-class travelers to Europe, for example. They expect to pay higher fares because they expect to obtain more enjoyment for their money. In order to compete successfully with Matson in the long run, another ship would have to provide Matson standards of service and pleasure. This would not be possible in an "austerity" type vessel. It is doubtful if it could be achieved by inexperienced operators.

An early announcement by Matson that it had decided to enter the Monterey in the Hawaii-Mainland service would probably prevent the inauguration of a third vessel on this route for some time to come. The LaGuardia operators would know they were assuming very considerable risks without the probability of a sufficiently high profit return to make the risks worthwhile.

Should Matson's decision be adverse to the placement of a second vessel in the Hawaii service, however, it is believed likely that the LaGuardia or some other ship will, sooner or later, enter this run. There can be no secret of the Lurline's backlog of demand, and other operators are doubtless analyzing the future of the travel industry and of ocean passenger transportation. The Hawaii-West Coast route will become increasingly attractive as the Hawaii visitor industry expands and as more and more evidence accumulates that the Pacific travel routes can support more vessels than are now operating on them. This is true particularly if Matson does not intend to compete for a larger share of the potential.

In the event that other operators were to become established and successful in the Hawaii service, Matson could anticipate increasing difficulty in maintaining the prestige and load factors of the Lurline as that ship becomes older and nears retirement.

APPENDIX

Appendix Table I

COMPARISON OF TOTAL LOCAL PASSENGER TRAFFIC BETWEEN HAWAII AND MAINLAND
WITH BASIC UNITED STATES ECONOMIC DATA AND VISITORS TO WESTERN NATIONAL PARKS
AND TO HAWAII NATIONAL PARK

Year	Visitors to Western Nat'l Parks	Visitors to Hawaii Nat'l Park	Visitors to Hawaii Staying 2+ Days	U.S. G.N.P. (billions of 1954 dollars)	Consumer Expenditures (billions of 1954 dollars)	U.S. Population (millions)	U.S. Recreation Expenditures (millions of 1954 dollars)	To/From Hawaii			Estimated Traffic Without Strikes	
								Ship Traffic (excl 3rd class)	Air Traffic	Total Traffic	Ship	Total
1929				177	125	122	6,934					
1930				161	117	123						
1931				149	113	124						
1932				127	103	125						
1933				126	102	126	4,838					
1934				141	108	126						
1935				153	114	127						
1936				173	126	128						
1937				181	130	129						
1938				173	128	130						
1939				189	135	131						
1940				206	143	132	7,515					
1941	4,695,029	271,824	31,846	239	153	133						
1942				267	151	135						
1943				301	156	137						
1944				324	162	138						
1945				316	173	140	8,884					
1946	5,369,726	405,755	15,000	285	191	141	11,677	18,257	25,835	44,092		
1947	6,596,088	382,482	25,000	285	196	144	11,473	26,126	67,959	94,085		
1948	7,295,613	387,753	36,397	296	200	147	11,191	29,010	69,883	98,893	36,828	106,711
1949	7,690,977	350,504	34,386	297	206	149	11,566	20,408	64,444	84,852	40,043	104,487
1950	7,974,253	362,245	46,593	322	217	152	12,585	39,008	66,942	105,950		
1951	9,053,023	498,023	51,565	345	216	154	11,743	38,294	82,767	121,061	39,732	122,499
1952	10,295,339	694,632	60,539	355	223	156	11,611	31,019	104,306	135,325	39,273	143,579
1953	10,689,463	416,942	80,346	368	233	158	11,946	41,997	136,430	178,427		
1954	10,927,547	444,551	91,287	360	238	166	12,229	42,181	152,911	195,092		
1955 (est)								42,000	190,000	232,000		
1960				452	(290)	179						
1965				532		192						
1970				618		206						
1975				714	(440)	222						

Sources: Data on Gross National Product, Consumer Expenditures, and United States Population Projections from Stanford Research Institute estimates; data on Visitors to Western National Parks from United States Park Service; travel to Hawaii from Matson records of local passenger traffic between Hawaii and Mainland—Stanford Research Institute Projections; Personal Consumption Expenditures for Recreation from Table 332, Statistical Abstract, 1954, except for 1954 figure which is from Survey of Current Business, July 1955.

Appendix Table II

TRAVEL OF UNITED STATES CITIZENS TO FOREIGN COUNTRIES
 COMPARED WITH
 TOTAL LOCAL PASSENGER TRAFFIC BETWEEN HAWAII AND MAINLAND,
 WESTBOUND VISITORS TO HAWAII STAYING TWO DAYS OR LONGER,
 AND WITH UNITED STATES DISPOSABLE INCOME PAYMENTS

Year	Citizen Passengers to Overseas Destinations (fiscal year ending June 30)		Westbound Hawaii Visitors Staying 2+ Days	Total Hawaii-Mainland Local Traffic (both directions)	Disposable Income Payments (billions of 1954 dollars)
	Actual (thousands)	Trend Based on G.N.P. ^{1/} (thousands)			
1931	429	429	14,332	30,669	120
1932	351		9,464	22,379	103
1933	323		9,345	23,355	104
1934	255		14,841	32,807	113
1935	265		18,030	40,699	122
1936	306		20,039	44,719	141
1937	386		19,489	45,596	142
1938	393		20,853	49,340	133
1939	328		21,737	52,797	144
1940	218		23,369	55,150	152
1941	163		30,425	62,733	170
1942	109				187
1943	59				192
1944	61		(War Years)		206
1945	100				202
1946	226		14,000	44,092	206
1947	446		23,000	94,085	202
1948	474		33,000	98,893	207
1949	548		32,000	84,852	205
1950	652		43,000	105,950	224
1951	664		47,634	121,061	227
1952	813		54,618	135,325	229
1953	924		72,152	178,427	241
1954	969		81,388	195,092	243
1960					292
1965					330
1970					387
1975		1,560			442

^{1/} Equation for calculated line is $y = \frac{-33.3+4.505x}{2}$; correlation coefficient is .93.

Sources: Data on Disposable Income Payments, Actual - Survey of Current Business, July 1953.
 Disposable Income Payments, Estimated - Stanford Research Institute.
 Data on Citizen Passenger Total, Actual - United States Department of Justice, Immigration and Naturalization Service Annual Summaries.
 Citizen Passenger Estimate, 1954-1975 - Stanford Research Institute.
 Westbound Hawaii Visitors - Hawaii Visitors Bureau, Annual Research Report on Visitors to Hawaii, 1953 and 1954.
 Total Hawaii - Mainland Local Traffic (Both Directions), Matson Records.

Appendix Table III

TRAVEL OF UNITED STATES CITIZENS FROM MAINLAND TO OVERSEAS AREAS,
BY SEA AND AIR
(Fiscal Year Ending June 30)

Arrived In	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945
<u>Hawaii</u> ^{1/}										
Air	70,000 ^{2/}	54,821 ^{2/}	44,214 ^{2/}	30,970	33,655	32,753	31,201	23,011	6,076	6,771
Sea	22,000	20,714	21,994	22,757	15,436	15,866	17,896	15,289	19,109	11,894
Total	92,000	75,535	66,208	53,727	49,091	48,619	49,097	38,300	25,185	18,665
Percent by Sea	24.0%	27.4%	33.2%	42.4%	31.4%	32.6%	36.4%	39.9%	75.9%	63.7%
<u>Europe</u>										
Air	189,012	175,013	116,309	88,649	91,565	68,322	45,672	37,619	24,817	23,325
Sea	253,207	240,183	206,559	165,568	190,618	154,312	113,455	90,946	25,097	4,559
Total	442,219	415,196	322,868	254,217	282,183	222,634	159,127	128,565	49,914	27,884
Percent by Sea	57.3%	57.8%	64.0%	65.1%	67.6%	69.3%	71.3%	70.7%	50.3%	16.3%
<u>Bermuda</u>										
Air	59,942	58,146	51,903	45,070	25,196	28,207	27,880	24,505	12,418	3,597
Sea	17,721	18,036	18,810	20,721	21,401	12,554	2,329	6,799	2,232	5
Total	77,663	76,182	70,713	65,791	46,597	40,761	30,209	31,304	14,650	3,602
Percent by Sea	22.8%	23.7%	26.6%	31.5%	45.9%	30.8%	7.7%	21.7%	15.2%	0.1%
<u>British West Indies</u>										
Air	75,376	68,724	60,958	58,823	46,270	27,947	22,382	22,840	11,946	2,879
Sea	11,705	8,656	8,568	7,816	4,610	3,934	6,833	6,009	2,909	423
Total	87,081	77,380	69,526	66,639	50,880	31,881	29,215	28,849	14,855	3,302
Percent by Sea	13.4%	11.2%	12.3%	11.7%	9.1%	12.3%	23.4%	20.8%	19.6%	12.8%
<u>South America</u>										
Air	31,827	29,105	29,154	24,202	18,162	19,998	19,454	15,509	10,954	8,491
Sea	8,010	9,092	9,801	12,076	13,849	13,518	10,892	5,154	2,991	491
Total	39,837	38,197	38,955	36,278	32,011	33,516	30,346	20,663	13,945	8,982
Percent by Sea	20.1%	23.8%	25.2%	33.3%	43.3%	40.3%	35.9%	24.9%	21.4%	5.5%
<u>All Countries</u>										
Air	576,506	552,388	477,811	397,802	330,837	283,356	249,886	259,103	175,392	91,997
Sea	392,715	371,172	334,833	265,971	320,758	264,996	224,162	187,217	50,916	8,493
Total	969,221	923,560	812,644	663,773	651,595	548,352	474,048	446,320	226,308	100,490
Percent by Sea	40.5%	40.2%	41.2%	40.1%	49.2%	48.3%	47.3%	41.9%	22.5%	8.4%
<u>Mexico</u>										
Air	10,589 ^{3/}	14,033	14,358	9,036	2,246	2,220				
Sea	220	396	488	421	508	573				
Total	10,809	14,429	14,846	9,457	2,754	2,793	n.a.	n.a.	n.a.	n.a.

^{1/} United States citizens only, arriving from Mainland.

^{2/} Estimated.

^{3/} Does not reflect total visitation because of large number of unreported automobile travelers.

Source: United States Department of Justice, Immigration and Naturalization Service.

Appendix Table IV

UNITED STATES POPULATION FORECASTS, BY AGE GROUP
(As Percent of Total)

Age Group	1950			1955			1960		
	Pacific States	Total U.S. Less Pacific States	Total U.S.	Pacific States	Total U.S. Less Pacific States	Total U.S.	Pacific States	Total U.S. Less Pacific States	Total U.S.
Total Population	14,454	138,025	152,479	17,393	149,325	166,718	20,263	159,120	179,383
Total Pacific States as Percent of Total U.S.	9.5%			10.4%			11.3%		
Under 25	38.5	42.2%	41.9%	39.7	44.0%	43.5%	40.9	45.9%	45.4%
25-34	16.8	15.6	15.7	15.7	14.2	14.4	14.2	12.7	12.9
35-44	15.1	14.1	14.1	15.3	13.5	13.7	15.2	13.0	13.3
45-54	11.8	11.4	11.4	12.0	11.3	11.4	12.7	11.4	11.4
55-64	9.2	8.8	8.8	9.0	8.7	8.7	8.8	8.7	8.7
65 and Over	8.6	8.1	8.1	8.3	8.3	8.3	8.2	8.3	8.3
Over 25 Total	61.5	57.8	58.1	60.3	56.0	56.5	59.1	54.1	54.6

Age Group	1965			1970			1975		
	Pacific States	Total U.S. Less Pacific States	Total U.S.	Pacific States	Total U.S. Less Pacific States	Total U.S.	Pacific States	Total U.S. Less Pacific States	Total U.S.
Total Population	23,053	169,188	192,241	26,100	180,146	206,246	29,439	192,355	221,794
Total Pacific States as Percent of Total U.S.	12.0%			12.7%			13.3%		
Under 25	42.1	47.5%	46.8%	42.6	48.1%	47.4%	42.5	47.9%	47.2%
25-34	12.5	12.0	12.0	13.1	12.5	12.6	14.0	14.1	14.0
35-44	14.8	12.1	12.5	13.0	10.9	11.2	11.9	10.2	10.5
45-54	13.0	11.2	11.5	13.0	10.9	11.2	12.6	10.1	10.5
55-64	9.2	8.7	8.8	9.9	9.0	9.0	10.1	8.8	9.0
65 and Over	8.2	8.5	8.4	8.4	8.6	8.6	8.9	8.9	8.8
Over 25 Total	57.9	52.5	53.2	57.4	51.9	52.6	57.5	52.1	52.8

Source: Stanford Research Institute, "Population Trends in the United States Through 1975," August 1955.

Appendix Table V

COMPARATIVE AIR FARE DATA
(U.S. Currency - Excluding Tax)

	Between					
	First Class			Tourist Class		
	Chicago	Pacific Coast Cities	New York City	Chicago	Pacific Coast Cities	New York City
<u>Acapulco</u>						
One Way	\$123.35	\$ 107.35	\$154.75	\$ 85.35	\$ 84.35	\$108.35
Round Trip	233.50	193.30	293.10	168.90	151.90	214.90
<u>Curacao</u>						
One Way	213.20	276.90	173.00	--	--	--
Round Trip	391.80	500.40	311.40	--	--	--
<u>Havana</u>						
One Way	97.10	168.00	95.80	--	--	--
Round Trip	183.20	314.20	180.80	--	--	--
<u>Honolulu</u>						
One Way	282.80	168.00	326.90	201.00	125.00	224.00
Round Trip	537.10	319.00	620.90	402.00	250.00	448.00
<u>London</u>						
One Way	440.00	554.70	400.00	323.00	389.00	290.00
Round Trip	795.60	1,011.00	720.00	588.00	720.00	522.00
<u>Mexico City</u>						
One Way	114.00	98.00	145.40	76.00	75.00	99.00
Round Trip	216.60	176.40	276.20	152.00	135.00	198.00
<u>Nassau</u>						
One Way	100.20	172.80	96.70	--	--	--
Round Trip	188.40	326.40	181.80	--	--	--
<u>San Juan</u>						
One Way	137.80	216.80	100.00	93.30	157.70	64.00
Round Trip	251.90	405.60	180.00	186.60	315.40	128.00

Source: Official Airline Guide, October 1955.

Appendix Table VI

PROJECTION OF TOTAL LOCAL HAWAII--UNITED STATES MAINLAND
TRAFFIC COMPARED WITH DISPOSABLE INCOME PAYMENTS

Year	Disposable Income (billions of 1954 dollars)			Actual	Hawaii--Mainland Local Traffic (both directions)						
	United States	Mountain States	Pacific States		Adjusted Assuming No Ship Strikes	Estimate A	Estimate B	Estimate B ¹	Estimate C	Estimate D	SRI Estimate
1929	139	3.6	11.6								
1930	129	3.2	11.2								
1931	120	3.0	10.6	30,669							
1932	103	2.4	9.0	22,379							
1933	104	2.6	9.1	23,355							
1934	113	2.9	9.9	32,807							
1935	122	3.2	10.8	40,699							
1936	141	3.8	13.1	44,719							
1937	142	4.0	13.1	45,596							
1938	133	3.7	12.7	49,340							
1939	144	3.9	13.5	52,797							
1940	152	4.3	14.7	55,150							
1941	170	4.7	17.6	62,733							
1942	187	5.8	20.5								
1943	192	6.5	25.1								
1944	206	6.2	24.6								
1945	202	6.2	23.3								
1946	206	6.3	24.2	(44,092)							
1947	202	6.6	23.2	94,085							
1948	207	6.6	23.3	98,893	106,711						
1949	205	6.6	23.4	84,852	104,487						
1950	224	7.2	25.6	105,950							
1951	227	7.8	26.1	121,061	122,499						
1952	229	7.7	27.2	135,325	143,579						
1953	241	7.9	28.8	178,427							
1954	243			195,092							
1955				(232,000)							
1960	292	9.9	36.1								300,000
1965	330	11.7	43.0								370,000
1970	387	13.7	50.2								440,000
1975	442	15.8	58.4			938,400	612,200	543,300	513,200	376,700	510,000

Source: Disposable Income, Actual--Survey of Current Business, July 1955. Estimates--Stanford Research Institute.
Hawaii--Mainland Local Traffic--Matson Passenger Traffic Statistics, 1954. Traffic estimates--Stanford Research Institute.
Estimate A--Excludes depression and war years; 1948, 1949, 1951, 1952 adjusted to estimated traffic with no strikes.
(Equation $\log Y_c = 2.5497 + .0347x$).
Estimate B--Based on actual traffic 1931-1941, 1947-1955, (Equation $\log Y_c = 2.4549 + .0296x$).
Estimate B¹--Based on 1947, 1950, 1953, 1954, and 1955, actual traffic, and 1948, 1949, 1951, 1952 adjusted for strikes,
(Equation $Y_c = 590.3 + 167x$).
Estimate C--Based on 1931, 1934-1941, 1947-1948, 1950-1955 actual traffic, (Equation $\log Y_c = 2.5223 + .0264x$).
Estimate D--Based on United States and Pacific States Disposable Income and 1954 Hawaii--Mainland Traffic.
SRI Projection--1975 estimates = Average B, B¹, C, and D. Intermediate years calculated on basis arithmetic trend line
to show equal annual increments.

Appendix Table VII

WEIGHTED AVERAGE LURLINE RATE STRUCTURE COMPARED WITH
ACTUAL AVERAGE FARES AND AIRLINE RATES
(U.S. Dollars)

	Date of Rate Change									
	4/15/48	6/1/49	7/1/49	1/1/51	5/1/51	3/1/52	11/1/52	1/1/53	12/3/53	1/1/54
<u>Lurline</u> Weighted Average										
Round Trip	376.43	404.63	411.83	438.25	438.25	482.70		507.88		534.36
One Way	188.21	202.23	205.59	219.13	242.37	267.19		281.91		297.06
<u>Airlines</u> Round Trip										
1st Class						288.00	302.40			319.00
Tourist						--	--		225.00	250.00
<u>Airlines</u> One Way										
1st Class						160.00	168.00			
Tourist						--	--		125.00	
<u>Lurline</u> Average Fare One Way	Average Fare Paid on Lurline--One Way									
	1948	1949	1950	1951		1952		1953		1954
	181.47	198.34	190.05	205.17		223.88		244.05		256.04

Source: Matson Records; Official Airline Guide, October 1955.



Stanford Research Institute. Pass

44-228 WICHSMITH